

**Odczynniki do
cytometrii przepływowej:
znakowane przeciwciała
i multimery MHC
firmy Sanquin (Holandia)**

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Wyłączny przedstawiciel na terenie Polski:

immunologia.**BIZ**

ELISpot, ELISA, cytometria przepływowa:
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Reagents for flow cytometry

Sanquin Reagents, your source for complete cell analysis: MHC-Multimers, antibodies to CDs, granzymes and others as well as dedicated activating antibodies.

PeliMers: MHC-Multimers

MHC-multimers have revolutionised immunological research, as they are the first reagents that identify antigen-specific T-cells in FACS analysis. MHC-multimer technology is increasingly recognised as the golden standard for the quantification of specific T-cell immune response, illustrated by the more than 500 citations of the original publication: Phenotypic Analysis of Antigen-Specific T-Lymphocytes; Altman, John et. al. Science 1996 274: 94-96.

In 1999, Sanquin Reagents / Research in Amsterdam and the Netherlands Cancer Institute (NKI) in Amsterdam launched an MHC-multimer core facility at Sanquin's premises. Our goal to combine knowledge in order to optimise the synthesis of HLA class I and II multimers has been achieved and since 2000 we offer Class I PeliMers, custom synthesis and peptides.

Background

Antigen presenting cells present part of their proteinaceous content to the immune system via the proteolytic generation of peptides, which are transported to the lumen of the endoplasmic reticulum, where they meet HLA class I molecules. Antigenic peptides bind with different affinities to the peptide binding pockets of the different HLA alleles. When they bind with a sufficient binding affinity, the HLA-peptide complexes are transported to the cell surface. Here, they can be recognised by antigen-specific cytotoxic CD8⁺ T-cells. This recognition leads to activation and proliferation of the responsive T-cells and results in the lysis and removal of cells presenting the specific HLA-peptide complexes. T-cells recognise determinants that are present on the HLA allele itself as well as on the peptide. Because of this property,

T-cell activation by HLA class I molecules can occur in response to a type of HLA allele that does not match with the T-cells (for instance because it is present on a donor-organ) or an antigenic peptide that is derived from an abnormal cellular protein (for instance in tumours), or a pathogen (for instance viruses or bacteria). Besides the cytolytic CD8⁺ T-cell response the cellular immune response consists of another component, the CD4⁺ T-helper response. The T-helper response supports the proliferation and activity of CD8⁺ T-cells by producing the necessary growth factors and cytokines and therefore plays a pivotal role in the regulation of the immune system. CD4⁺ T-cells recognise antigen in the context of a Class II HLA molecules. These HLA Class II molecules are present on specific antigen-presenting cells and bind to peptides derived from proteolysis of extracellular proteins that have been endocytosed by these cells. Hereto, the HLA Class II molecules are targeted to the endocytic pathway by binding to an invariant polypeptide. This polypeptide is subsequently proteolysed and replaced by peptides from endocytosed extracellular proteins before the HLA molecules reach the cell surface. To optimise antigen presentation and T-cell recognition, each individual possesses several types of HLA Class I and II molecules, which are distinguished by subunit composition. HLA class I molecules consist of an invariant small beta-2-microglobulin subunit and a variable larger alpha subunit that contains the antigen binding site. The overall structure of HLA Class I and II molecules is similar, but class II molecules are composed of two equally sized alpha and beta subunits, that both contribute to the antigen binding site and HLA type. In vitro synthesised soluble HLA-peptide complexes are used as multimeric complexes to detect antigen-specific T-cells in FACS analysis.

Applications

MHC class I multimers have been used in a wide array of experimental and clinical settings to detect T-cells directed against viral, tumour and transplantation antigens. More recently, MHC-multimers have successfully been used for the isolation of antigen-specific cytotoxic T-cells for use in adoptive T-cell therapies.

PeliMers product range

- **PeliMers, MHC-multimers**

Under the trade name PeliMers, Sanquin offers a fast expanding range of PE and APC labelled MHC-Multimers for human and mouse MHC Class I.

- **Custom made PeliMers**

In addition to our products from stock, we offer custom production of MHC-multimers.

- **Separate Peptides**

Separate peptides can be ordered together with your order for MHC-multimers

antibodies to CD_s, granzymes and others as well as dedicated activating antibodies

A background of many years of outstanding research into human leukocytes and cellular immunology, together with high-quality diagnostic laboratory services and extensive experience in the production of immunological reagents, have made Sanquin an expert on CD markers of human leukocytes. Sanquin is offering an extensive, up-to-date range of clustered monoclonal antibodies.

We make every effort to meet the requirements of our customers: reliable, economical reagents for the measurement of human leukocytes and for studying their functions. All our products meet the highest quality standards and are manufactured under the strictest specifications.

From the early 80's, Sanquin has been active in the development of monoclonal antibodies and has participated in the International Workshops on Human Leukocyte Antigens. Most of Sanquin's monoclonal antibodies against human leukocytes have been characterised in these Workshops.

To ensure high quality and consistency of its monoclonal antibodies, Sanquin maintains a rigorous quality assurance programme, requiring extensive testing at all stages of production. A major asset of Sanquin is the opportunity to test the performance of its antibodies within the setting of its own clinical-immunological diagnostic laboratories.

Product range of cell-specific monoclonal antibodies

- **PeliCluster™ monoclonal antibodies**

Under the trade name PeliCluster™, Sanquin offers an ever expanding range of unlabelled and labelled cell-specific monoclonal antibodies. Monoclonal antibodies are available with fluorescein (FITC), phycoerythrin (PE) and phycoerythrin-Cy5 (PE-Cy5) labels. The fluorescein, phycoerythrin and phycoerythrin-Cy5 labelled monoclonal antibodies are for use in flow cytometry.

- **Non clustered monoclonal antibodies**

Next to the clustered monoclonal (CD) antibodies, Sanquin sells a number of unlabelled and labelled cell-specific monoclonal antibodies which are not (yet) clustered. These can be supplied, labelled with fluorescein (FITC) or phycoerythrin (PE).

- **PeliDuo™ monoclonal antibody sets**

The dual colour-labelled sets of monoclonal antibodies are suitable for use in flow cytometry. In each PeliDuo™ monoclonal antibody set one of the antibodies is fluorescein-labelled, the other is phycoerythrin-labelled.

- **PeliTrio™ monoclonal antibody sets**

The triple colour-labelled sets of monoclonal antibodies are suitable for use in flow cytometry. In each PeliTrio™ monoclonal antibody set one antibody is fluorescein labelled, one antibody is phycoerythrin labelled and one antibody is phycoerythrin-Cy5 labelled.

- **PeliCluster™ cell-stimulating antibodies**

T cell-stimulating antibodies designed to study proliferation and functional activities of T cells.

PeliMers, human MHC-multimers

For availability of Pelimers in your country, please inquire.

Routinely used MHC-multimers available from stock, conjugated to PE or APC and offered as 50 tests. Test samples containing a small aliquote of the PeliMer for 10 tests are available at a very low price.

PeliMers are a rapidly expanding product group. The products listed in this catalogue reflect the stock situation at present. Please check our website for the up-to-date situation.

<i>epitope</i>	<i>allele</i>	<i>description</i>	<i>order code PE</i>	<i>order code APC</i>
FLU				
CTELKLSDY	A*0101	PeliMer A1/FLU	M2425CTELK	M2426CTELK
VSDGGPNLY	A*0101	PeliMer A1/FLU	M2425VSDGG	
GILGFVFTL	A*0201	PeliMer A2/FLU	M2427GILGF	M2428GILGF
HIV				
SLYNTVATL	A*0201	PeliMer A2/HIV-gag	M2427SLYNT	M2428SLYNT
ILKEPVHGV	A*0201	PeliMer A2/HIV-pol	M2427ILKEP	
RLRPGGKKK	A*0301	PeliMer A3/HIV-gag	M2429RLRPG	M2430RLRPG
IVLPEKDSW	B*5701	PeliMer B57/HIV-pol	M2439IVLPE	
KAFSPEVIPMF	B*5701	PeliMer B57/HIV-gag	M2439KAFSP	
CMV				
NLVPMVATV	A*0201	PeliMer A2/CMV (pp65)	M2427NLVPM	M2428NLVPM
EBV				
GLCTLVAML	A*0201	PeliMer A2/EBV		M2428GLCTL
RLRAEAQVK	A*0301	PeliMer A3/EBV	M2429RLRAE	
KIRLRPGGK	A*0301	PeliMer A3/EBV		M2430KIRLR
IVTDFSVIK	A*1101	PeliMer A11/EBV	M2431IVTDF	
AVFDRKSDAK	A*1101	PeliMer A11/EBV	M2431AVFDR	M2432AVFDR
RPPIFIRRL	B*0702	PeliMer B7/EBV	M2433RPPIF	M2434RPPIF
RAKFKQLL	B*0801	PeliMer B8/EBV	M2435RAKFK	M2436RAKFK
FLRGRAYGL	B*0801	PeliMer B8/EBV		M2436FLRGR
EPLPQGQLTAY	B*3501	PeliMer B35/BZLF1	M2437EPLPQ	
HPVGEADYFEY	B*3501	PeliMer B35/EBNA1	M2437HPVGE	
RSV				
NPKASLLSL	B*0702	PeliMer B7/RSV		M2434NPKAS
HBV				
FLLSLGIHL	A*0201	PeliMer A2/HBV-pol	M2427FLLSL	
FLPSDFFPSV	A*0201	PeliMer A2/HBV-core	M2427FLPSD	
WLSLLWPFV	A*0201	PeliMer A2/HBV-env	M2427WLSLL	

<i>Epitope</i>	<i>Allele</i>	<i>Description</i>	<i>Order code PE</i>	<i>Order code APC</i>
HPV				
KLPQLCTEL	A*0201	PeliMer A2/HPV	M2427KLPQL	
TUMOUR				
EADPTGHSY	A*0101	PeliMer A1/MAGE-1	M2425EADPT	
ALKDVEERV	A*0201	PeliMer A2/MAGE-C2	M2427ALKDV	
YLSGANLNL	A*0201	PeliMer A2/CEA	M2427YLSGA	
ELAGIGILTV	A*0201	PeliMer A2/MART-1	M2427ELAGI	
IMDQVPFSV	A*0201	PeliMer A2/gp100	M2427IMDQV	
KTWGQYWQV	A*0201	PeliMer A2/gp100	M2427KTWGQ	
YLEPGPVTA	A*0201	PeliMer A2/gp100	M2427YLEPG	
YMDGTMSQV	A*0201	PeliMer A2/Tyrosinase	M2427YMDGT	M2428YMDGT
RMFPNAPYL	A*0201	PeliMer A2/WT-1	M2427RMFPN	

PeliMers, mouse MHC-multimers

SIINFEKL	H2-Kb	PeliMer H2-Kb/OVA		M2711SIINF
SVYDFVWL	H2-Kb	PeliMer H2-Kb/TRP-2		M2711SVYDF
ASNENMDAM	H2-Db	PeliMer H2-Db/F5	M2712ASNEN	M2713ASNEN
ASNENMETM	H2-Db	PeliMer H2-Db/F5	M2712AS-TM	
KCSRNRQYL	H2-Db	PeliMer H2-Db/HY	M2712KCSRN	
RAHYNIVTF	H2-Db	PeliMer H2-Db/E7	M2712RAHYN	
KCSRNRQYL	H2-Db	PeliMer H2-Db/HY		M2713KCSRN

Stability

The product should be stored at -18°C to -32°C, in the dark. The reagent is stable until the expiry date stated on the label. Unlike other MHC-multimers, Sanquin PeliMers can be stored frozen. This way the shelf life can be extended and it is recommended to prepare aliquots and store these at -18 to -32°C. Do not freeze-thaw these aliquots more than once

PeliMers, custom made

Custom Synthesis of MHC-multimers and monomers.

On request we manufacture MHC-multimers or monomers with the peptides of your choice.

Custom MHC Class I multimers can be produced in 4 to 6 weeks and are available with the following alleles:

Human alleles

HLA-A*0101
HLA-A*0201
HLA-A*0301
HLA-A*1101
HLA-B*0702
HLA-B*0801
HLA-B*3501
HLA-B*5701

Murine alleles

Kb
Db

Our range of alleles is continuously expanding; if the required allele is not listed please contact us.

Separate Peptides

All our custom-made MHC-multimers and PeliMers from stock are made with in-house synthesised peptides with a purity of >90%. These separate peptides can be ordered together with your order for MHC-multimers and are delivered lyophilised.

PeliCluster™ monoclonal antibodies

The purified (Neat) monoclonal antibodies (1 ml, 0.2 mg) are sufficient for at least 200 tests with e.g. fluorescence microscopy. Fluorescein-labelled (FITC) monoclonal antibodies, phycoerythrin-labelled (PE) monoclonal antibodies and phycoerythrin-Cy5-labelled antibodies (1ml) are sufficient for at least 100 tests in flow cytometry. All purified, neat, antibodies are for Research Use Only (RUO). All labelled monoclonal antibodies as well as PeliDuo and PeliTrio pairs are CE marked (unless marked as RUO) and can be used for diagnostic purposes.

CD	-- order number and p-code --				iso-type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD1a	M2120 P47	M2255 P47	M2140 P36		IgG2b	WM35	T6; cortical thymocytes (strong), sub-population of B cells, Langerhans cells, subpopulation of dendritic cells.
CD2	M1314 P35	M1465 P35			IgG1	CLB-T11/1, 6G4	T11; E-receptor, Tp50; all T cells, most NK cells; 3 antigenic epitopes known, one of which is SRBC-binding site.
CD3	M1306 P35	M1466 P35			IgG2a	CLB-T3/2, 16A9	T3; CD3 complex; mature T cells (membrane), immature T cells (cytoplasmic).
			M1741 P36	M2292 P50	IgG1	UCHT-1	
CD4	M1308 P35				IgG2a	CLB-T4/1, 10A12	T4; helper/inducer T cells, subpopulation of cortical thymocytes, subpopulation of monocytes and macrophages, some AML.
		M1467 P35	M1648 P36		IgG1	CLB-T4/2, 6D10	
				M1753 P50	IgG2a	S3.5	
CD5	M1310 P35	M1602 P35	M1649 P36		IgG1	CLB-T1/1, 1C12	T1, p67; thymocytes and mature T cells, subset of B cells, B-CLL.
CD6	M1681 P35				IgG1	CLB-B6	T12; pan-T cell, thymocytes and mature T cells, subset of B-cells, B-CLL.
CD7	M1339 P35	M1567 P35			IgG2a	CLB-T-3A1/1, 7F3	T16, p41; almost all T cells, NK cells, subset of immature myeloid cells, some AML.
CD8	M1312 P35	M1468 P35	M1629 P36		IgG2b	CLB-T8/4, 4H8	T8; cytotoxic/suppressor T cells, subset of cortical thymocytes, subpopulation of NK cells.
				M1744 P50	IgG2a	3B5	
CD9	M1362 P35	M1666 P35			IgG2a	CLB-thromb/8, 4E1	p24; platelets, subset of B cells (follicular center cells), subset of precursor B cells, monocytes, megakaryocytes, eosinophils, basophils, endothelial cells.
CD10	M1337 P35	M1603 P35	M1692 P36		IgG2a	CLB-CALLA/1, 4F9	CALLA, gp100; subset of precursor B cells, subset of B cells (follicular center cells), subset of cortical thymocytes, common acute leukemia, granulocytes.
CD11a	M1385 P35	M1667 P35			IgG2a	CLB-LFA-1/2, TB 133	LFA-1, αL subunit; majority of lymphoid and myeloid cells, absent in LAD-1 patients.
CD11b	M1386 P35	M1668 P35			IgM	CLB-mon-gran/1, B2	C3bi receptor, CR3, M subunit; monocytes, macrophages, granulocytes, NK cells, absent in LAD-1 patients.

CD	-- order number and p-code --				iso- type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD13	M1387 P35	M1568 P35	M1726 P36		IgG2a	CLB-mon-gran/2, Q20	aminopeptidase N; almost all myeloid cells, dendritic cells in skin, endothelial cells.
CD14	M1388 P35	M1430 P35	M1661 P36	M1745 P50	IgG2a	CLB-mon/1, 8G3 TUK4	gp55, LPS/LBP receptor; monocytic cells, macrophages, granulocytes, absent in PNH patients.
CD15	M1336 P35	M1435 P35			IgM	CLB-gran/2, B4	Lewis ^x ; cells of the granulocytic lineage, monocytes (weak), Reed Sternberg cells.
CD16	M1389 P35	M1604 P35	M1690 P36		IgG2a	CLB-FcR gran/1, 5D2	FcγRIIIA; neutrophil granulocytes, monocytes (weak), macrophages (weak), NK cells, absent in patients with PNH.
CD16b	M1390 P35				IgG2a	CLB-gran/11, 5D7	FcγRIIIB; only expressed on neutrophil granulocytes, two allelic variants, NA1 and NA2. This clone reacts with NA1, absent in patients with PNH.
CD18	M1344 P35	M1669 P35			IgG1	CLB-LFA-1/1, 54	integrin β2 chain; majority of lymphoid and myeloid cells (see CD11a, b and c), absent in patients with LAD-1.
CD19	M1345 P35	M1436 P35	M1588 P36 M2285 P49	M1746 P50	IgG1 IgG1 IgG1	CLB-B4/1, 11G1 J4.119 5J25-C1	B4, Bgp 95; precursor B cells, B cells.
CD20	M1644 P35	M1646 P35			IgG1	NK1-IH4	B1, Bg383,10; all B cells, subset of precursor B cells, follicular dendritic cells.
CD21	M1723 P35	M1834 P35			IgG1	CLB-5D1	B2, C3d-/EBV-receptor, gp140; subsets of B cells (e.g. follicular mantle cells), follicular dendritic cells, subset of thymocytes, T cells.
CD22	M1391 P35	M1437 P35	M1727 P36		IgG1	CLB-B-ly/1, 6B11	Bgp135; precursor B cells (cytoplasmic), subset of mature B cells (membrane).
CD23		M2108 P47			IgG3	Tü1	FcεRII, gp50-45; membrane glycoprotein; FcεRIIA is expressed on a subset of B cells (e.g. follicular mantle cells) and B-CLL cells, FcεRIIB is expressed by a subset of B cells and by monocytes, eosinophils, dendritic cells.
CD24	M1361 P35	M1605 P35			IgG1	CLB-gran-B-ly/1, IB5	subset of precursor B cells, neutrophils and eosinophils; absent in patients with PNH.
CD25	M1335 P35	M1680 P35	M1728 P36		IgG2b	CLB-IL2R/1, TB 30	Tac, IL-2-receptor; activated T cells, activated B cells, activated macrophages, hairy cell leukemia.
CD26	M1696 P35				IgG1	CLB-22C3	dipeptidylpeptidase IV; activated T cells, activated B cells, macrophages.
CD27	M1455 P35	M1764 P47			IgG2a	CLB-CD27/1, 9F4	T14; mature T cells, activated T cells, subset of B cells (e.g. cytoplasmic expression in plasma cells).

CD	-- order number and p-code --				iso- type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD28	M1456 P35				IgG1	CLB-CD28/1,15E8	Tp44; subset of T cells (especially cytotoxic/suppressor T cells).
	M2241 P47	M2180 P47			IgG1	KOLT-2	
CD29	M2129 P47	M2233 P47			IgG1	2A4	Integrin β 1 subunit; platelet GPIIa, resting and activated leucocytes, high expression on CD45RO+ T cells (broad tissue distribution).
CD30	M2283 P35				IgG1	HSR-4	Ki-1; subpopulation of activated lymphoid cells, Reed-Sternberg cells.
CD31	M1536 P35	M1670 P35			IgG1	CLB-HEC-75	platelet GPIIa, PECAM-1; platelets, monocytes, granulocytes, subset of T cells, NK cells, B cells, endothelial cells.
CD32	M2202 P47				IgG1	CIKm5	Fc γ RII; monocytes, subpopulation of macrophages, granulocytes, eosinophils, B cells.
CD33	M1585 P35	M1606 P35	M1662 P36		IgG1	CLB-MD33.6	My9; majority of myeloid and monocytic cells (except for granulocytes).
CD34	M1636 P35				IgG1	CLB-MD34.2	My10; all haematopoietic progenitors and stem cells, endothelial cells.
			M2110 P48	M2281 P49	IgG1	QBEnd10	
				M2284 P49	IgG1	581	
CD35	M2122 P47	M2136 P47			IgG1	E11	CR1 (C3b receptor); B cells, granulocytes, monocytes, erythrocytes, follicular dendritic cells, some T cells, NK cells.
CD36	M1537 P35	M1613 P35			IgG1	CLB-IVC7	platelet GPIV; monocytes, macrophages, early erythroid cells, megakaryocytes, platelets, B cells.
CD37		M2139 P47			IgG2a	NMN46	gp40-45; B cells, weak expression on T cells, monocytes and granulocytes.
CD38	M1642 P35	M1785 P35			IgM	CLB-ID5	T10, gp45; activated T and B cells, precursor cells (e.g. thymocytes), subsets of B cells (e.g. follicular center cells), plasma cells.
					IgG1	HIT2	
CD40	M1691 P35				IgM	CLB-14G7	BB20; mature B cells, monocytes (weak), follicular dendritic cells.
CD41	M1538 P35	M1674 P35			IgG1	CLB-tromb/7, 6C9	platelet GPIIb, integrin IIb; megakaryocytes, platelets, absent or reduced in patients with Glanzmann's thrombasthenia.
					IgG1	M148	
CD42b	M1539 P35	M1638 P35	M1729 P36		IgG1	CLB-MB45	platelet GPIIb; megakaryocytes, platelets, absent or reduced in patients with Bernard-Soulier syndrome.
	M1851 P35	M1852 biotin labelled P51			IgG1	CLB-MB15	
CD42d	M1637 P35				IgG1	CLB-SW16	platelet GPV; megakaryocytes, platelets, absent or reduced in patients with Bernard-Soulier syndrome.

CD	-- order number and p-code --				iso- type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD43	M2242 P47	M2183 P47			IgG1	DFT1	leucosialin; all leucocytes, except resting B cells.
CD44	M1676 P47	M1678 P47			IgG1	NKI-P2	Pgp-1; leucocytes and erythrocytes (broad tissue distribution).
CD45	M1343 P35	M1491 P35	M1596 P36		IgG1	CLB-T200/1, 15D9	T200; LCA; all leucocytes.
				M1747 P50	IgG1	HI30	
CD45R0	M2232 P35	M2113 P47			IgG2a	UCHL1	restricted T200, gp180; thymocytes, activated T cells, preferentially memory T cells, weak expression on monocytes and granulocytes.
CD45RA	M2111 P35	M2146 P47	M2112 P49		IgG1	F8-11-13	restricted T200, gp220; naive T cells, B cells, granulocytes, monocytes.
CD46	M2148 P47				IgG1	J4-48	MCP, gp45-70; leucocytes (broad tissue distribution).
CD47	M2149 P47				IgG2b	BRIC 126	IAP, OA3; leucocytes and erythrocytes (broad tissue distribution).
CD48	M2150 P47				IgG1	MEM 102	BLAST-1, gp41; all lymphocytes, NK cells, monocytes, activated neutrophils, weak on eosinophils.
CD49b	M1540 P35	M1671 P35			IgG1	CLB-tromb/4, 10G11	VLA-2, integrin α 2 chain, platelet GPIa; platelets, activated T cells, cultured T cells, weak expression on monocytes.
CD49c	M2151 P47				IgG1	11G5	VLA-3, integrin α 3 chain; cultured T cells, adherent cell lines (non haematopoietic cells).
CD49d	M2152 P47				IgG1	15A8	VLA-4, integrin α 4 chain; thymocytes, T and B cells, monocytes, eosinophils (neural crest cells), α 4 β 7, lymphocytes homing to mucosa-associated lymphoid tissue.
CD49e	M1586 P35				IgG2b	NKI-SAM-1	VLA-5, integrin α 5 chain, platelet GPIc; neutrophils, monocytes, platelets, weak expression on T cells.
CD49f	M1566 P35	M1672 P35			IgG2a	NKI-GoH3 (rat)	VLA-6, integrin 6 chain, platelet GPIc; megakaryocytes, platelets, thymocytes, subpopulation of T cells, monocytes.
CD51	M1541 P35				IgG1	NKI-M9	VNR, integrin α v; megakaryocytes, platelets, some B cells, monocytes/macrophages.
CD53	M2114 P47				IgG1	MEM 53	all leucocytes
CD54	M2115 P47	M2154 P47			IgG1	15.2	ICAM-1; monocytes, lymphocytes (broad tissue distribution), increased expression upon activation.
CD55		M2192 P47			IgG1	143-30	DAF; leucocytes, platelets, erythrocytes, broad tissue distribution; absent in PNH patients.

CD	- - order number and p-code - -				iso- type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD56	M1645 P35				IgG1	NKI-nbI-1	N-CAM; NK cells, some T cells, neuro-ectodermal cells.
				M2277 P49	IgG1	B159	
CD57	M2204 P47	M2272 P49			IgM	NC1	HNK1, gp110; NK cells, T cells, B cell subset.
CD58	M2157 P47				IgG2a	BRIC 5	LFA-3; leucocytes, erythrocytes, epithelial cells (broad tissue distribution), absent in patients with PNH.
CD59	M2121 P47	M2191 P47			IgG2a	MEM 43	MIRL, gp18-20, Ly6; nearly all cell types, member of Ly6 family (see CD87); absent in patients with PNH.
CD61	M1355 P35	M1592 P35			IgG1	CLB-tromb/1, C17	platelet GPIIIa , integrin β 3 subunit; together with GPIIb (CD41) on megakaryocytes, platelets, with CD51 VNR- α (CD51) on endothelial cells, some B cells, monocytes, platelets.
CD62P	M1543 P35		M1706 P36		IgG1	CLB-tromb/6, C2	P-selectin, GMP-140; megakaryocytes, activated platelets, endothelial cells, increased membrane expression upon activation.
			M2187 P47		IgG1	AK6	
CD63	M1544 P35		M1698 P36		IgG1	CLB-gran/12, 435	LIMP, ME491; activated platelets, monocytes, lymphocytes (weak), granulocytes (weak).
CD64	M2159 P47				IgG1	10.1	Fc γ R1 (high affinity); monocytes, activated granulocytes.
CD65	M1719 P35	M1720 P35			IgM	88H7	ceramide-dodecasaccharide 40, majority of myeloid and monocytic cells, negative on normal CD34+ cells;
CD66b	M1546 P35	M1594 P35			IgG1	CLB-B13.9	CGM6 (previous CD67); granulocytes, increased expression upon activation, absent in PNH patients.
CD66 acde	M1545 P35	M1643 P35	M1693 P36		IgG1	CLB-gran/10, IH4Fc	CEA, granulocytes; increased expression upon activation; tumour cells.
CD69			M2282 P36		IgG2b	TP1.55.3	early activated B and T cells
CD70	M1705 P35				IgG1	CLB-2F2	Ki-24; subpopulation of activated B and T cells, Reed-Sternberg cells and anaplastic large cell lymphoma.
CD71	M2160 P47	M2162 P47	M2119 P49		IgG1	RVS10	T antigen, OKT9; proliferating cells, activated T and B cells, macrophages.
CD74	M2163 P47				IgG1	BU45	MHC-class-II-associated invariant chain; B cells, monocytes and macrophages.
CD80	M1708 P35				IgG1	CLB-DAL1	B7, BB1; subpopulation of B cells, activated B cells, subpopulation of T cells, subpopulation of monocytes, dendritic cells.

CD	-- order number and p-code --				iso-type	clone name	synonym(s) and major reactivity
	Neat	FITC	PE	PE-Cy5			
CD95	M1714 P35				IgG2a	FAS18	APO-1, FAS; subpopulation of thymocytes, activated T cells, subpopulation of B cells, NK cells.
	M1715 P35	M1735 P35			IgG1	FAS19	
CD103	M1721 P48	M1722 P48			IgG2a	2G5	HML-1, integrin αE subunit; mucosa-associated T cells (especially intra-epithelial CD8+T cells), < 2% of resting blood lymphocytes (increased upon activation) part of mucosal T-NHL; most HCL.
CD105	M1765 P35				IgG1	CLB-HEC-19	Endoglin: endothelial cells, syncytiotrophoblasts and activated monocytes. umbilical vein endothelial cells (HUVECs)
CD122	M2172 P48	M2189 P48			IgG2a	MIK- β 1	IL-2R β ; activated T cells, NK cells, monocytes.
CD138	M1663 P35		M2287 P36		IgG1	CLB-1D4	syndecan 1; plasma cells
CD235a	M1365 P35	M1593 P35	M1732 P36		IgG1	CLB-AME-1	erythrocytes, glycophorin A.

Controls

controls	-- order number and p-code --				iso-type
	Neat	FITC	PE	PE-Cy5	
IgG1	M1451 P46	M1453 P46	M1628 P19		IgG1
IgG2a	M1452 P46	M1454 P46	M1697 P19	M1748 P19	IgG2a
IgG2b	M2173 P46	M2190 P46	M2230 P19		IgG2b

Non clustered antibodies / granzyme antibodies

<i>antibody</i>	<i>-- order number and p-code --</i>					<i>iso- type</i>	<i>clone name</i>	<i>synonym(s) and major reactivity</i>
	<i>Neat</i>	<i>FITC</i>	<i>PE</i>	<i>PE-Cy5</i>	<i>biotin</i>			
Ery-H/1	M1392 P35					IgM	CLB-7C11	erythrocytes, and platelets(weak), H antigen.
MPO	M1464 P35	M1703 P35				IgG1	CLB-MPO-1/1, 7.17	pan myeloid (AML marker), myeloperoxidase, gp55-15.
LTF	M1700 P35		M1731 P36			IgG1	CLB-13.17	myeloid range from myelocyte on, lactoferrin, gp82
HLA-DR	M1338 P35	M1607 P35				IgG1	CLB-HLA-Dr, 1E5	HLA-class II.
ANCA	M1574 P35					IgG1	CLB-12.8	myeloid lysosomal serine protease (PR3).
GA6	M1791 P51					IgG1	GA6	Granzyme A
GA28	M1766 P51				M1798 P51	IgG1	GA28	Granzyme A
GA29	M1767 P51					IgG1	GA29	Granzyme A
GB7	M1754 P51					Ig2A	GB7	Granzyme B
GB10	M1755 P51				M1793 P51	IgG1	GB10	Granzyme B
GB11	M1756 P51		M2289 P51		M1794 P51	IgG1	GB11	Granzyme B
GB12	M1757 P51				M1795 P51	IgG1	GB12	Granzyme B

PeliDuo™ monoclonal antibody sets

Dual colour-labelled (fluorescein and phycoerythrin) sets of monoclonal antibodies (1 ml) sufficient for at least 50 tests in flow cytometry

<i>CD</i>	<i>order number p-code</i>	<i>Isotype</i>	<i>application</i>
CD2 F / CD19 PE	M1624 P36	IgG1 / IgG1	T / B lymphocytes
CD3 F / CD4 PE	M2247 P36	IgG2a / IgG1	T / T helper-inducer lymphocytes
CD3 F / CD8 PE	M1598 P36	IgG2a / IgG2b	T / T cytotoxic-suppressor lymphocytes
CD3 F / CD16 PE	M1724 P36	IgG2a / IgG2b	T lymphocytes / granulocytes, NK cells
CD3 F / CD19 PE	M1699 P36	IgG2a / IgG1	T / B lymphocytes
CD4 F / CD8 PE	M1599 P36	IgG1 / IgG2b	T helper-inducer / T cytotoxic-suppressor lymphocytes
CD14 F / CD45 PE	M1626 P36	IgG2a / IgG1	monocytes / pan-leucocytes
CD45 F / CD14 PE	M2248 P36	IgG1 / IgG1	pan-leucocytes / monocytes
<i>controls</i>	<i>order number p-code</i>	<i>Isotype</i>	
IgG1 F / IgG1 PE	M1627 P19	IgG1 / IgG1	
IgG2a F / IgG1 PE	M2251 P19	IgG2a / IgG1	

PeliTrio™ monoclonal antibody sets

Triple colour-labelled sets of monoclonal antibodies (1ml), in which one antibody is fluorescein-(FITC) labelled, one antibody is phycoerythrin-(PE) labelled and one antibody is phycoerythrin-Cy5 labelled. Suitable for Becton Dickinson, Coulter and Ortho flowcytometers. The below mentioned products include a no-wash-lysing solution.

<i>CD</i>	<i>order number</i>	<i>clones</i>
CD4 F / CD8 PE / CD3 PE-Cy5	M1825.S	CLB-T4/2 - CLB-T8/4 - UCHT-1
	P39	
CD16 F / CD19 PE / CD3 PE-Cy5	M1799.S	368 - 467 - UCHT-1
	P39	

<i>controls</i>	<i>order number</i>
IgG2aF / IgG2a PE / IgG2a PE-Cy5	M1826.S

<i>order-number</i>	<i>p-code</i>	<i>package</i>	<i>description</i>
M7101.6	P23	6x10ml	PeliLyse buffer A1, no-wash-lysing solution, stock for 300 tests

PeliCluster™ cell-stimulating antibodies

Among the more than 240 CD markers on the membrane of human leucocytes known today, those directly involved in functional activities are of particular interest, since these are the target molecules to study the immune system at a cellular level. Some monoclonal antibodies can stimulate T cells into proliferation spontaneously or in the presence of a 'second signal'. The Sanquin T cell-stimulating antibodies have applications in research as well as in clinical diagnostics, e.g. to study immunocompetence in immunocompromised patients.

T cell-stimulating monoclonal antibodies

monoclonal antibody solutions (200 µg/0,1 ml), 0.22 µm filtered

<i>CD</i>	<i>order number p-code</i>	<i>Iso- type</i>	<i>clone name</i>
CD2	M1651 P35	IgG1	CLB-T11.1/1, 6G4
CD2	M1652 P35	IgG1	CLB-T11.2/1, 4B2
CD2	M1653 P35	IgG1	CLB-HIK27
CD3	M1654 P35	IgE	CLB-T3/4.E, 1XE
CD3	M1655 P35	IgG2A	CLB-T3/2, 16A9
CD28	M1650 P35	IgG1	CLB-CD28/1, 15E8

Wyłączny przedstawiciel firm
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