

BD FACS™ CAP

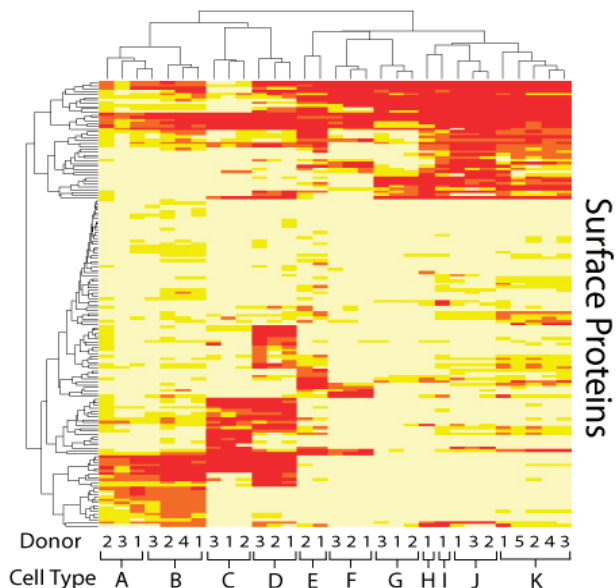
Practical Proteomics for Human Cell Characterization

The BD FACS™ CAP custom service is a practical proteomics solution that enables researchers to identify, characterize and quantify expression of human cell surface markers. The BD FACS™ CAP service allows customers to leverage a state of the art flow cytometry lab without investing in costly internal development programs. Once cell samples are received by BD, turnaround time for a typical study is four to eight weeks. This includes the BD FACS™ CAP analysis and report.

The service lets researchers achieve a higher level of scientific insight by extracting and analyzing a richer data set faster and more cost-effectively than conventional flow cytometry techniques.

Features

- Single-cell resolution enables analysis of sub-populations of rare cells
- Custom service leverages BD's expertise as the world leader in flow cytometry
- Flexible format can integrate customer's specific markers



Heat map showing relative expression of cell surface proteins of eleven different cell types. Color intensity indicates the percentage of cells positive for each marker.

BD FACS™ CAP (Combinatorial Antibody Profiling)

With the BD FACS™ CAP antibody array, BD incorporates the quality and broad selection of the Pharmingen antibody line with industry-leading flow cytometry solutions to offer a unique cell characterization service to researchers utilizing stem cells in drug discovery or cell therapy. BD FACS™ CAP is a proteomics solution designed to inventory expressed cell surface proteins, providing researchers with an information-rich "fingerprint" of individual cell types. A continuously growing and evolving set of human cell surface markers provide a broad sampling of various classes of cell surface proteins.

BD FACS™ CAP technology may be used on a variety of human cell types. Large scale surface marker analysis may indicate variations in cell state indicative of donor to donor variations, cell type-specific markers, or treatment-specific changes.

- Donor qualification
- Quality assurance testing
- Expression/Function correlations
- Cell Sorting
- Cell Purification
- Sub-population analysis
- Process development
- Media Optimization
- Discovery Biology

Markers representing several GO categories are represented in BD FACS™ CAP. Please see the back page for a full list of antibodies in BD FACS™ CAP.

GO Category	Number of Proteins Annotated With This GO Term With Antibodies on FACS™ CAP
Receptor activity	103
Protein binding	101
Immune response	80
Signal transduction	55
Cell adhesion	51
Inflammatory response	24
Chemotaxis	17
Apoptosis	15
Cell proliferation	12
Cell-cell signaling	12
Cell motility	12
Cell-cell adhesion	12



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Human cell surface markers for BD FACS™ CAP (current as of May 2008)

CD.Designation	Antigen
---	CLA
---	FMC7
---	MIC A/B
---	TWEAK
---	HLA-A,B,C
---	HLA-DR
---	SSEA4
---	CCR4
---	fMLP receptor
---	Leukotriene B4 Receptor
---	Lymphotoxin b Receptor
---	CD137 Ligand
---	CD4 v4
---	CD212 (IL-12 receptor b2)
---	HPC cell
---	Integrin b7
---	HER-2/neu
---	EGFR
CD1A	CD1a
CD1B	CD1b
CD1D	CD1d
CD2	CD2
CD3E	CD3
CD4	CD4
CD5	CD5
CD6	CD6
CD7	CD7
CD8	CD8
CD9	CD9
CD10	CD10
CD11A	CD11a
CD11B	CD11b/Mac-1
CD11C	CD11c
CD13	CD13
CD14	CD14
CD15	CD15
CD16	CD16
CD16B	CD16b
CD18	CD18
CD19	CD19
CD20	CD20
CD21	CD21
CD22	CD22
CD23	CD23
CD24	CD24
CD25	CD25
CD26	CD26
CD27	CD27
CD28	CD28
CD29	CD29
CD30	CD30
CD31	CD31
CD32	CD32
CD33	CD33
CD34	CD34
CD35	CD35
CD36	CD36
CD37	CD37
CD38	CD38
CD40	CD40
CD41 CD61	PAC-1
CD41A	CD41a
CD41B	CD41b
CD42A	CD42a
CD42B	CD42b
CD43	CD43
CD44	CD44
CD45	CD45
CD45RA	CD45RA
CD45RB	CD45RB

CD.Designation	Antigen
CD46	CD46
CD47	CD47
CD48	CD48
CD49A	CD49a
CD49B	CD49b
CD49C	CD49c
CD49D	CD49d
CD49E	CD49e
CD49F	CD49f
CD50	CD50
CD51 CD61	CD51/61
CD53	CD53
CD54	CD54
CD55	CD55
CD56	CD56
CD57	CD57
CD58	CD58
CD59	CD59
CD61	CD61
CD62E	CD62E
CD62L	CD62L
CD62P	CD62P
CD63	CD63
CD64	CD64
CD66	CD66
CD66B	CD66b
CD69	CD69
CD70	CD70
CD71	CD71
CD72	CD72
CD73	CD73
CD74	CD74
CD75	CD75
CD77	CD77
CD79A	CD79a
CD79B	CD79b
CD80	CD80
CD80	CD80
CD81	CD81
CD83	CD83
CD84	CD84
CD85J	CD85
CD86	CD86
CD87	CD87
CD88	CD88
CD89	CD89
CD90	CD90
CD91	CD91
CD93	CDw93
CD94	CD94
CD95	CD95
CD97	CD97
CD98	CD98
CD99	CD99
CD103	CD103
CD104	CD104
CD105	CD105
CD106	CD106
CD107A	CD107a
CD107B	CD107b
CD108	CD108
CD109	CD109
CD110	CD110
CD112	CD112
CD114	CD114
CD116	CD116
CD117	CD117
CD119	CD119
CD120A	CD120a
CD120B	CD120b

CD.Designation	Antigen
CD123	CD123
CD124	CD124
CD126	CD126
CD127	CD127
CD130	CD130
CD132	CD132
CD133	CD133
CD134	CD134
CD135	CD135
CD137	CD137
CD138	CD138
CD140A	CD140a
CD140B	CD140b
CD141	CD141
CD142	CD142
CD146	CD146
CD147	CD147
CD150	CD150
CD151	CD151
CD152	CD152
CD154	CD154
CD158A	CD158a
CD158B	CD158b
CD158E1	NKB1
CD161	CD161
CD162	CD162
CD163	CD163
CD164	CD164
CD165	CD165
CD166	CD166
CD172B	CD172b
CD180	CD180
CD181	CD181
CD182	CXCR2
CD183	CD183
CD184	CD184
CD185	CXCR5
CD191	CCR1
CD192	CCR2
CD193	CCR3
CD195	CD195
CD196	CCR6
CD197	CCR7
CDw198	CCR8
CDw199	CCR9
CD200	CD200
CD206	CD206
CD209	CD209
CDw210	CD210
CD212	CD212 (IL-12 receptor b1)
CD220	CD220
CD221	CD221
CD226	CD226
CD227	CD227
CD235A	CD235a
CD243	P-glycoprotein
CD244	CD244
CD252	CD252
CD268	CD268
CD271	CD271
CD273	PD-L2
CD275	CD275
CD278	CD278
CD279	CD279
CD282	CD282
CD305	LAIR1
CD309	KDR
CD314	NKG2D
CD321	F11 Receptor

Customer-specific markers of interest may be added to BD FACS™ CAP. Additional fees may apply.