













Table S1. Description of the 12 primary human cell systems included in the BioMAP® Diversity Plus system (from Eurofins/DiscoverX)

System	Icon	Cell Type	Stimulation	Disease Relevance	Biomarker Readouts
3C		Venular endothelial cells	IL-1 β , TNF α and IFN γ	Cardiovascular Disease, Chronic Inflammation	MCP-1, VCAM-1, TM, TF, ICAM-1, E-selectin, uPAR, IL-8, MIG, HLA-DR, Proliferation, SRB
4H		Venular endothelial cells	IL-4 and histamine	Asthma, Allergy, Autoimmunity	MCP-1, Eotaxin-3, VCAM-1, P-selectin, uPAR, SRB, VEGFR11
LPS		Peripheral blood mononuclear cells + Venular endothelial cells	TLR4 ligand	Cardiovascular Disease, Chronic Inflammation	MCP-1, VCAM-1, TM, TF, CD40, E-selectin, CD69, IL-8, IL-1 α , M-CSF, sPGE ₂ , SRB, sTNF α
SAg		Peripheral blood mononuclear cells + Venular endothelial cells	TCR ligands (1x)	Autoimmune Disease, Chronic Inflammation	MCP-1, CD38, CD40, E-selectin, CD69, IL-8, MIG, PBMC Cytotoxicity, Proliferation, SRB
BT		Peripheral blood mononuclear cells + B cells	α -IgM and TCR ligands (0.001X)	Asthma, Allergy, Oncology, Autoimmunity	B cell Proliferation, PBMC Cytotoxicity, Secreted IgG, sIL-17A, sIL-17F, sIL-2, sIL-6, sTNF α
BF4T		Bronchial epithelial cells + Dermal fibroblasts	TNF α and IL-4	Asthma, Allergy, Fibrosis, Lung Inflammation	MCP-1, Eotaxin-3, VCAM-1, ICAM-1, CD90, IL-8, IL-1 α , Keratin 8/18, MMP-1, MMP-3, MMP-9, PAI-1, SRB, tPA, uPA
BE3C		Bronchial epithelial cells	IL-1 β , TNF α and IFN γ	Lung Inflammation, COPD	ICAM-1, uPAR, IP-10, I-TAC, IL-8, MIG, EGFR, HLA-DR, IL-1 α , Keratin 8/18, MMP-1, MMP-9, PAI-1, SRB, tPA, uPA
CASM3C		Coronary artery smooth muscle cells	IL-1 β , TNF α and IFN γ	Cardiovascular Inflammation, Restenosis	MCP-1, VCAM-1, TM, TF, uPAR, IL-8, MIG, HLA-DR, IL-6, LDLR, M-CSF, PAI-1, Proliferation, SAA, SRB
HDF3CGF		Dermal fibroblasts	IL-1 β , TNF α , IFN γ , EGF, bFGF and PDGF-BB	Fibrosis, Chronic Inflammation	MCP-1, VCAM-1, ICAM-1, Collagen I, Collagen III, IP-10, I-TAC, IL-8, MIG, EGFR, M-CSF, MMP-1, PAI-1, Proliferation_72hr, SRB, TIMP-1, TIMP-2
KF3CT		Keratinocytes + Dermal fibroblasts	IL-1 β , TNF α , IFN γ and TGF β	Psoriasis, Dermatitis, Skin Biology	MCP-1, ICAM-1, IP-10, IL-8, MIG, IL-1 α , MMP-9, PAI-1, SRB, TIMP-2, uPA
MyoF		Lung fibroblasts	TNF α and TGF β	Fibrosis, Chronic Inflammation, Wound Healing, Matrix Remodeling	α -SM Actin, bFGF, VCAM-1, Collagen-I, Collagen-III, Collagen-IV, IL-8, Decorin, MMP-1, PAI-1, TIMP-1, SRB
/Mphg		Venular endothelial cells + Macrophages	TLR2 ligand	Cardiovascular Inflammation, Restenosis, Chronic Inflammation	MCP-1, MIP-1 α , VCAM-1, CD40, E-selectin, CD69, IL-8, IL-1 α , M-CSF, sIL-10, SRB, SRB-Mphg