



## QUALITY CONTROL RANGES

**MILLIPLEX® MAP Human High Sensitivity T Cell Magnetic Bead Panel Catalog # HSTCMAG-28SK,  
HSTCMAG28SPMX13, HSTCMAG28SPMX21 or HSTC384PX21-MAG and**

**MILLIPLEX® MAP 384-Well High Sensitivity Human Cytokine Magnetic Bead Panel HSTC384-28K or HSTCMAG384-PX21  
Control Catalog # HSTC-6028 Lot # HST-109 and HST-209**

Analyte	QC Level	Expected Range	Units	Analyte	QC Level	Expected Range	Units
HITAC	Control 1	65 – 135	pg/mL	IL-21	Control 1	7.5 – 16	pg/mL
	Control 2	302 – 627	pg/mL		Control 2	38 – 78	pg/mL
GM-CSF	Control 1	51 – 106	pg/mL	IL-4	Control 1	57 – 118	pg/mL
	Control 2	235 – 488	pg/mL		Control 2	300 – 622	pg/mL
Fractalkine	Control 1	631 – 1312	pg/mL	IL-23	Control 1	283 – 587	pg/mL
	Control 2	3101 – 6440	pg/mL		Control 2	1356 – 2816	pg/mL
IFN $\gamma$	Control 1	34 – 95	pg/mL	IL-5	Control 1	21 – 44	pg/mL
	Control 2	167 – 347	pg/mL		Control 2	103 – 213	pg/mL
IL-10	Control 1	60 – 124	pg/mL	IL-6	Control 1	5.7 – 12	pg/mL
	Control 2	300 – 624	pg/mL		Control 2	32 – 65	pg/mL
MIP-3 $\alpha$	Control 1	25 – 51	pg/mL	IL-7	Control 1	14 – 29	pg/mL
	Control 2	114 – 236	pg/mL		Control 2	80 – 167	pg/mL
IL-12 (p70)	Control 1	19 – 40	pg/mL	IL-8	Control 1	10 – 21	pg/mL
	Control 2	96 – 199	pg/mL		Control 2	51 – 105	pg/mL
IL-13	Control 1	9.2 – 19	pg/mL	MIP-1 $\alpha$	Control 1	12 – 25	pg/mL
	Control 2	47 – 97	pg/mL		Control 2	59 – 122	pg/mL
IL-17A	Control 1	28 – 59	pg/mL	MIP-1 $\beta$	Control 1	44 – 92	pg/mL
	Control 2	135 – 280	pg/mL		Control 2	206 – 429	pg/mL
IL-1 $\beta$	Control 1	18 – 37	pg/mL	TNF $\alpha$	Control 1	16 – 34	pg/mL
	Control 2	89 – 185	pg/mL		Control 2	82 – 171	pg/mL
IL-2	Control 1	19 – 40	pg/mL				
	Control 2	96 – 199	pg/mL				

**Note: The Quality Control Ranges are generated using serum matrix provided in the kit.**

**Quality Control Ranges in culture media are not tested.**

HSTC-6028: HST-109.209 (21 April 2022) • EMD Millipore • 1-800-645-5476 • 1-800-645-5439 (FAX) • [emdmillipore.com](http://emdmillipore.com)  
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