

INTENDED USE & DESCRIPTION

For use as quantitative controls for the determination of cytokine concentrations in biological fluids. Concentrations have been assigned using R&D Systems™ Quantikine kits. Controls are prepared in diluted porcine serum with preservatives. They contain recombinant human cytokines at low, medium and high concentrations. Controls are supplied lyophilized.

STORAGE & STABILITY

Unreconstituted controls should be stored at 2-8 °C and are stable for at least 6 months from date of receipt. Depending on the analyte of interest, reconstituted controls may be stable when stored at ≤ -20 °C. Users should evaluate the frozen stability of the controls in their application or discard after use.

REAGENT PREPARATION

Reconstitute each vial with the volume of deionized or distilled water indicated in the chart below.

PROCEDURE & EXPECTED VALUES

Controls should be used undiluted and assayed as unknown specimens. **Note:** Do not activate controls when running TGF-β1.

The acceptable ranges (±3 SD) for the analytes in these controls are printed below. Due to possible variations in techniques and methodologies, it is recommended that each laboratory determine its own target range. Laboratories using other test systems should establish their own acceptable ranges as these assays may produce different values.

Analyte	Catalog #	Kit Diluent	Water Recon. Volume	Lot # 1495260 (pg/mL)	Lot # 1495261 (pg/mL)	Lot # 1495262 (pg/mL)
Human G-CSF	DCS50, SCS50, PDCS50	RD5-5	2.0 mL	134-228	406-715	746-1537
		RD6A		179-374	574-1023	1122-1954
Human GM-CSF	DGM00, SGM00, PDGM00	RD5-5	2.0 mL	31.7-51.8	96.3-157	185-302
		RD6P		41.3-67.4	127-208	245-400
Human IFN-γ	DIF50, SIF50, PDIF50	RD6-21	3.0 mL	48.0-113	198-372	457-815
Human IL-1α	DLA50, SLA50, PDLA50	RD5-5	2.0 mL	14.4-23.6	43.4-70.7	87.8-143
		RD6C		22.3-36.3	65.0-106	131-214
Human IL-1β	DLB50, SLB50, PDLB50	RD5-5	2.0 mL	18.0-31.0	54.6-89.1	110-179
		RD6C		26.4-43.1	77.6-127	157-257
Human IL-2	D2050, S2050, PD2050	RD5-5	2.0 mL	131-213	380-620	780-1273
		RD6E		177-288	521-850	1088-1775
Human IL-4	D4050, S4050, PD4050	RD5L	2.5 mL	108-218	363-596	719-1172
		RD6-9		108-197	348-586	697-1183
Human IL-6	D6050, S6050, PD6050	RD5T	2.0 mL	25.3-41.3	74.1-121	146-239
		RD6F		20.6-51.3	80.2-131	160-261
Human IL-10	D1000B, S1000B, PD1000B	RD5C	2.0 mL	28.1-59.3	101-165	209-341
		RD6P		40.5-71.1	130-212	264-431
Human IL-12 p70	D1200, S1200, PD1200	RD5C (cell culture supernates/serum/plasma)	1.5 mL	36.2-59.1	106-173	206-335
		RD5C (urine)		33.6-54.9	101-164	196-320
Human MCP-1	DCP00, SCP00, PDCP00	RD5L	2.0 mL	80.6-191	302-531	599-1056
		RD6Q		172-280	520-849	1016-1658
Human TGF-β1	DB100B, SB100B, PDB100B	RD5-53 (serum/plasma)	3.0 mL	208-369	461-763	854-1393
		RD5-53 (cell sups/urine)	2.0 mL	206-336	441-719	792-1292
Human VEGF	DVE00, SVE00, PDVE00	RD5K	4.0 mL	84.6-146	261-426	516-842
		RD6U	3.0 mL	115-188	348-567	704-1148

TECHNICAL HINTS & LIMITATIONS OF THE PROCEDURE

- The ranges were determined using R&D Systems Quantikine kits. If expected values are not obtained, verify that the lot numbers on the vials correspond with the lot numbers listed above and the correct volume of deionized or distilled water was used for reconstitution of the controls.
- The results obtained with these controls depend upon several factors associated with methods and instrumentation. Test systems other than those supplied by R&D Systems may result in values that differ from those printed on this product datasheet.