

### 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. Mix the controls by inverting vials 1-2 times to ensure complete reconstitution and allow to sit for a minimum of 15 minutes prior to use. Do not use rocker or vortex.

### PROCEDURE & EXPECTED VALUES

Controls should be used undiluted and assayed as unknown specimens.

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 # 1392966 (pg/mL)	Lot # 1392967 (pg/mL)	Lot # 1392968 (pg/mL)
Human Angiogenin	DAN00	RD5C	2.0 mL	281-463	894-1383	1569-2685
Human CCL11/Eotaxin	DTX00, STX00, PDX00	RD5K	1.5 mL	47-160	154-386	379-674
		RD60		60-119	168-316	334-646
Human CCL22/MDC	DMD00	RD6-21	2.0 mL	354-503	1064-1463	2011-2785
Human EGF	DEG00, SEG00, PDEG00	RD5E	2.0 mL	10-20	35-51	66-98
		RD6N		24-34	69-101	130-197
Human Flt-3 Ligand	DFK00	RD5R	1.0 mL	92-146	296-427	558-838
		RD6-11		92-150	294-434	552-826
Human GDF-15	DGD150, SGD150, PDGD150	RD5-20	3.0 mL	89-157	298-433	587-878
Human HGF	DHG00, SHG00, PDHG00	RD5P	3.0 mL	360-966	1471-3152	2717-6199
		RD6X		449-1188	1924-3668	3424-7107
Human IL-3	D3000	RD5-5	3.0 mL	126-184	449-583	935-1204
		RD6-35	4.0 mL	179-244	520-851	1222-1616
Human IL-11	D1100	RD5K	3.0 mL	82-149	274-448	657-1072
		RD6N		76-201	342-559	842-1374
Human IL-16	D1600	RD5R	2.0 mL	124-202	379-619	715-1166
		RD6-27		139-227	424-692	793-1294
Human IL-17*	D1700, S1700, PD1700	RD5R	2.0 mL	93-163	263-464	573-935
		RD6-21		105-176	280-500	603-984
Human KGF/FGF-7	DKG00	RD5R	2.0 mL	121-197	354-578	639-1043
		RD6-15		99-263	349-695	712-1236
Human M-CSF	DMC00B, SMC00B, PDMC00B	RD5-18	2.0 mL	364-609	1183-1811	2188-3608
		RD6P		403-782	1233-2400	2321-4708
Human SLPI	DPI00	RD5T	2.0 mL	222-429	800-1206	1520-2265
Human uPAR	DUP00	RD6P	2.0 mL	249-520	907-1486	1605-2623

\*Use within 1/2 hour of reconstitution.

### 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 data sheet.