

TNF Receptor 2

Units:	pg/mL	pg/mL	pg/mL
Assay Name	RnD Systems TNF-RII	Millipore Soluble Receptor Cytokine Panel	Millipore Magnetic Soluble Receptor Cytokine Panel
Catalog Number	DRT200	HSCR-32K	HSCRMAG-32K
Other Analytes On Multiplex	N/A	sCD30, sEGFR, sgp130, sIL-1RI, sIL-1RII, sIL-2Ra, sIL-4R, sIL-6R, sRAGE, sTNF-RII, sVEGF-RI, sVEGF-RII, sVEGF-RIII	sCD30, sEGFR, sgp130, sIL-1RI, sIL-1RII, sIL-2Ra, sIL-4R, sIL-6R, sRAGE, sTNF-RII, sVEGF-RI, sVEGF-RII, sVEGF-RIII
Volume Required Per Replicate	50uL	20uL	20uL
Typical Dilution	1:10	1:5	1:5
Manufacturer Defined Minimum Detectible Concentration	6.00 pg/mL	84.50 pg/mL	40.00 pg/mL
UVM Observed Minimum Detectible Concentration	70.20 pg/mL	84.50 pg/mL	40.00 pg/mL
Notes:		Obsolete. Replaced by Magnetic	Replacement for HSCR-32K
UVM Run Date	9/17/2015	8/8/2014	12/3/2015
SCS081611: 1	2515.456	8,775.45	8,733.54
SCS081611: 2	2003.402	6,234.20	5,969.89
SCS081611: 3	2145.643	6,515.99	7,107.39
SCS081611: 4	1531.955	4,274.53	4,569.47
SCS081611: 5	1917.902	5,809.64	5,955.24
SCS081611: 6	1716.103	3,928.82	3,932.52
SCS081611: 7	1921.595	6,204.36	6,601.63
SCS081611: 8	2104.952	5,133.83	6,526.28
SCS081611: 9	2120.09	5,643.96	6,409.74
SCS081611: 10	1858.698	5,436.46	5,146.33
SCS081611: 11	2257.433	7,147.67	6,693.99
SCS081611:12	1842.284	5,460.30	5,224.20
SCS081611: 13	2376.291	7,246.87	7,027.37
SCS081611: 14	2129.807	5,649.35	6,090.85
SCS081611: 15	2173.556	6,482.02	6,172.83
SCS081611: 16	1985.395	5,444.05	5,014.83
SCS081611: 17	2150.175	6,284.26	6,210.08
SCS081611: 18	2632.582	8,209.02	7,462.22
SCS081611: 19	2418.805	6,848.66	6,744.60
SCS081611: 20	2039.472	5,638.57	5,540.23
Average	2092.0798	6118.4005	6156.6615

Notes:

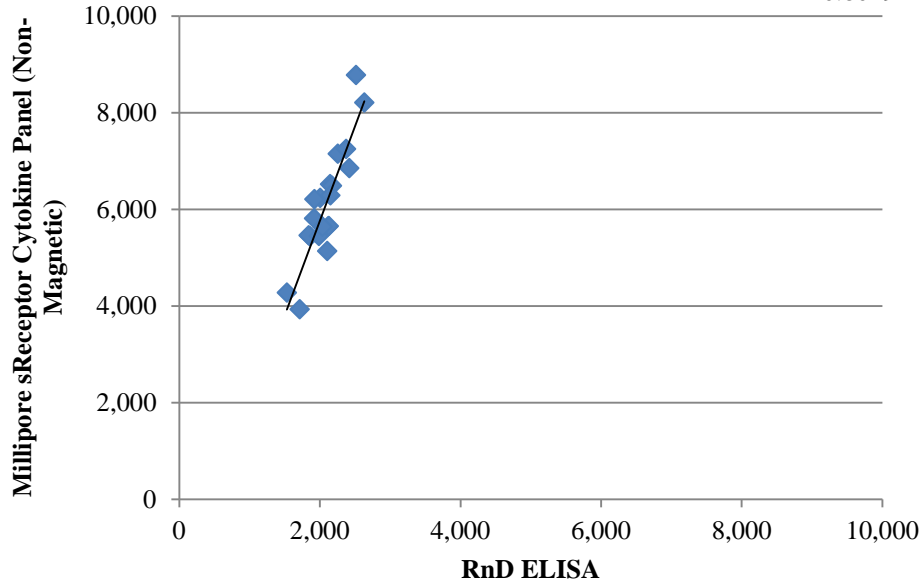
UVM Protocol for RnD ELISA assays is 10% below lowest standard/calibrator point

SCS = Serum Control Set

Serum and EDTA are NOT sourced from the same pools. Each set is from unique pools/participants. Sample type results may differ due to a number of factors including; measured range of set, sample type variability, reagent lot variability, specimen conditions, other pre-analytica variation.

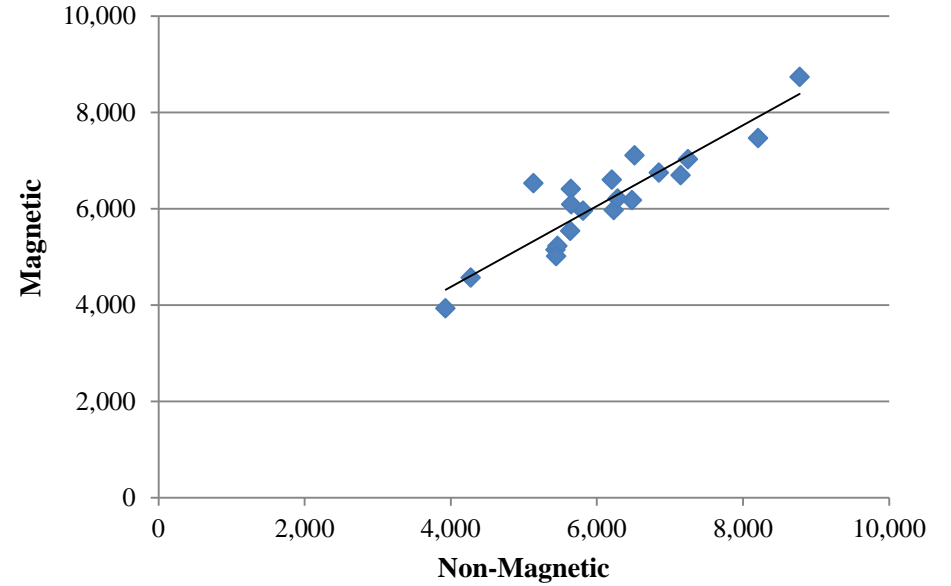
Serum TNF-RII: RnD ELISA vs. Millipore sReceptor Cytokine Panel (Non-Magnetic)

$y = 3.9169x - 2076$
 $R^2 = 0.8019$



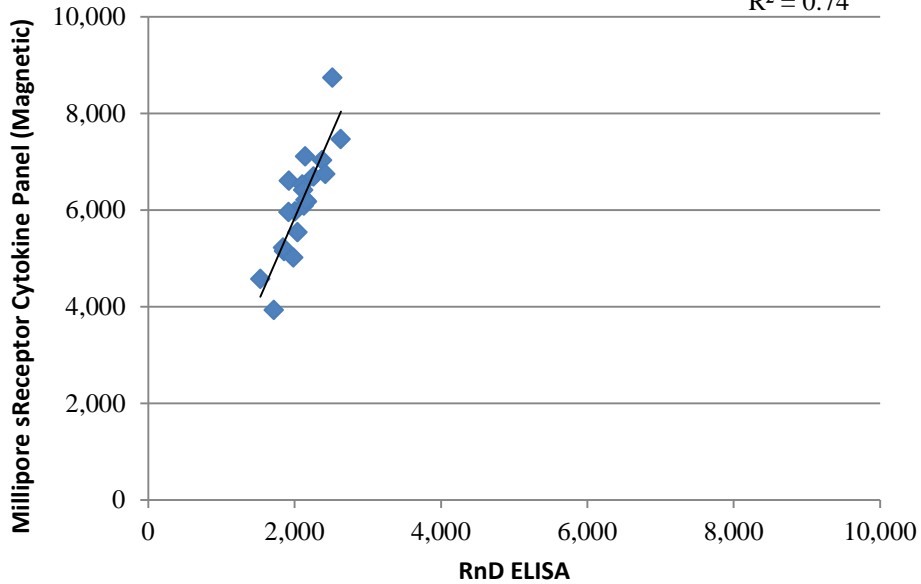
Serum TNF-RII: Millipore sReceptor Cytokine Panel Non-Magnetic vs. Magnetic

$y = 0.8381x + 1029$
 $R^2 = 0.8215$



Serum TNF-RII: RnD ELISA vs. Millipore sReceptor Cytokine Panel (Magnetic)

$y = 3.4791x - 1121.8$
 $R^2 = 0.74$



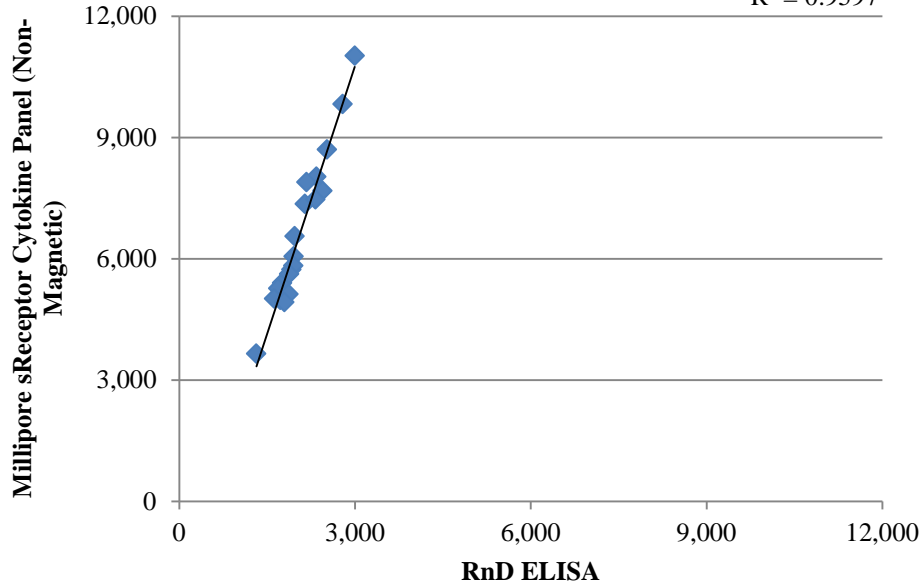
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UVM Observed Minimum Detectible Concentration	70.20 pg/mL	84.50 pg/mL	40.00 pg/mL
Notes:		Obsolete. Replaced by Magnetic	Replacement for HSCR-32K
UVM Run Date	9/17/2015	8/8/2014	6/26/2015
ECS052510: 1	2,443.162	7,681.18	7,672.01
ECS052510: 2	1,756.426	5,398.51	5,259.89
ECS052510: 3	2,996.137	11,020.39	9,448.31
ECS052510: 4	1,955.355	6,054.94	5,472.85
ECS052510: 5	2,141.883	7,352.34	7,192.10
ECS052510: 6	1,722.085	4,981.38	4,478.01
ECS052510: 7	2,339.908	8,024.63	7,151.07
ECS052510: 8	1,316.670	3,654.24	3,329.67
ECS052510: 9	1,915.608	5,731.18	5,481.05
ECS052510: 10	1,690.062	5,265.90	5,035.81
ECS052510: 11	2,787.676	9,822.58	8,895.69
ECS052510: 12	2,519.161	8,703.65	8,298.78
ECS052510: 13	1,971.846	6,553.13	6,064.43
ECS052510: 14	1,622.393	5,016.55	4,515.88
ECS052510: 15	1,946.335	5,832.19	5,628.84
ECS052510: 16	1,865.424	5,123.98	5,286.62
ECS052510: 17	2,324.756	7,468.31	6,116.30
ECS052510: 18	2,173.550	7,891.88	4,526.50
ECS052510: 19	1,793.665	4,926.33	5,586.16
ECS052510: 20	1,878.896	5,625.64	5,310.77
Average	2058.0499	6606.4465	6037.537

ECS = EDTA Control Set

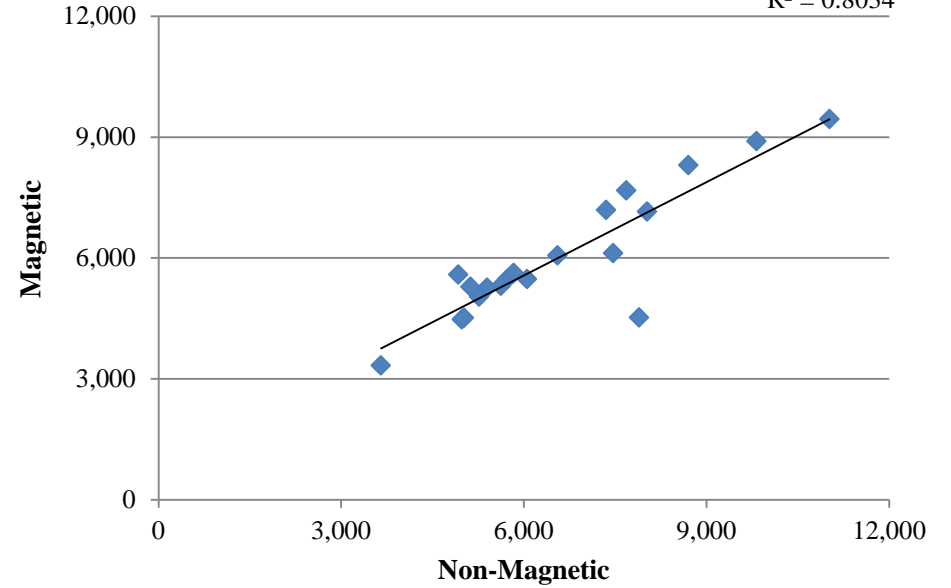
EDTA TNF-RII: RnD ELISA vs. Millipore sReceptor Cytokine Panel (Non-Magnetic)

$y = 4.411x - 2471.6$
 $R^2 = 0.9597$



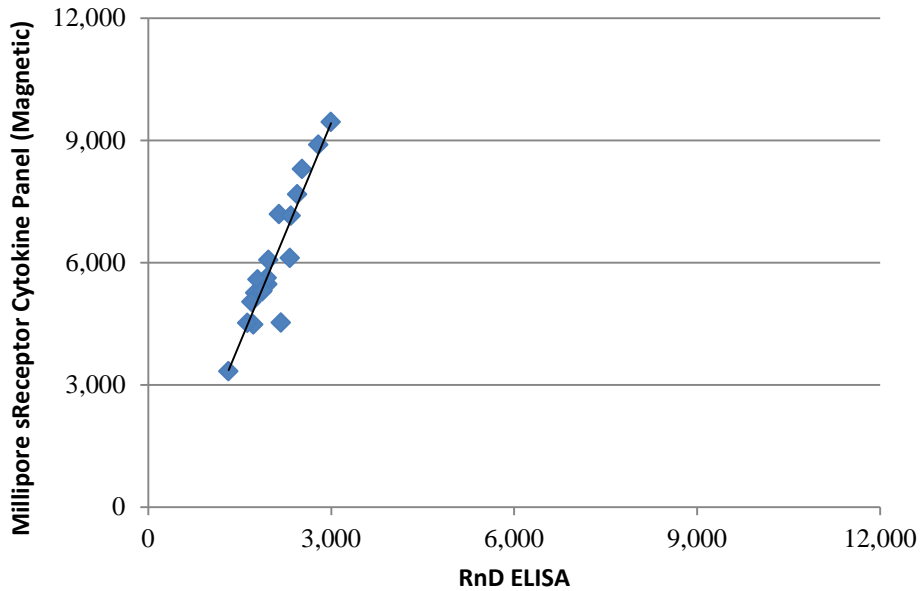
EDTA TNF-RII: Millipore sReceptor Cytokine Panel Non-Magnetic vs. Magnetic

$y = 0.7713x + 942.08$
 $R^2 = 0.8034$



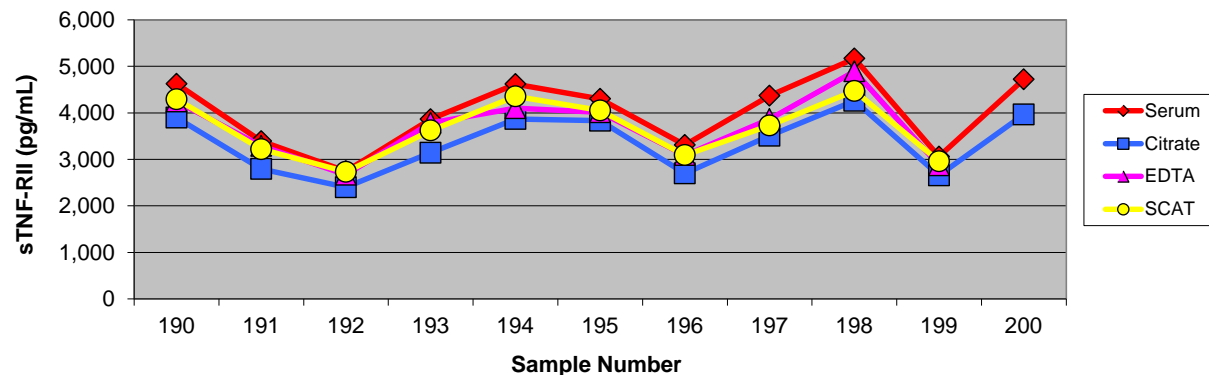
EDTA TNF-RII: RnD ELISA vs. Millipore sReceptor Cytokine Panel (Magnetic)

$y = 3.6064x - 1384.6$
 $R^2 = 0.8664$



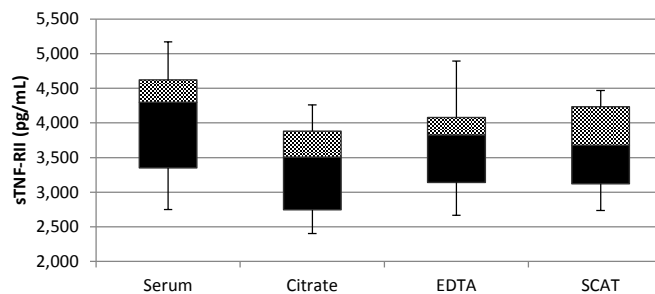
Sample Number	Serum	Citrate	EDTA	SCAT
190	4,623.03	3,898.12	4,243.03	4,292.43
191	3,393.57	2,792.45	3,288.71	3,217.07
192	2,747.32	2,401.06	2,667.19	2,733.73
193	3,865.51	3,142.29	3,785.57	3,621.50
194	4,620.00	3,867.58	4,099.92	4,355.97
195	4,300.07	3,831.29	4,012.62	4,053.74
196	3,309.11	2,698.53	3,091.62	3,091.07
197	4,368.67	3,506.12	3,867.06	3,731.40
198	5,170.86	4,258.32	4,895.35	4,469.52
199	3,059.59	2,655.08	2,872.17	2,960.12
200	4,719.88	3,966.69		
Average	4,016.15	3,365.23	3,682.32	3,652.66
Sample Type Average	3,679.09			
Sample Type Stdev	266.35			
Sample Type CV%	7.24			

Millipore Soluble Receptor Cytokine Panel sTNF-RII Tube Type Comparison By Sample Number

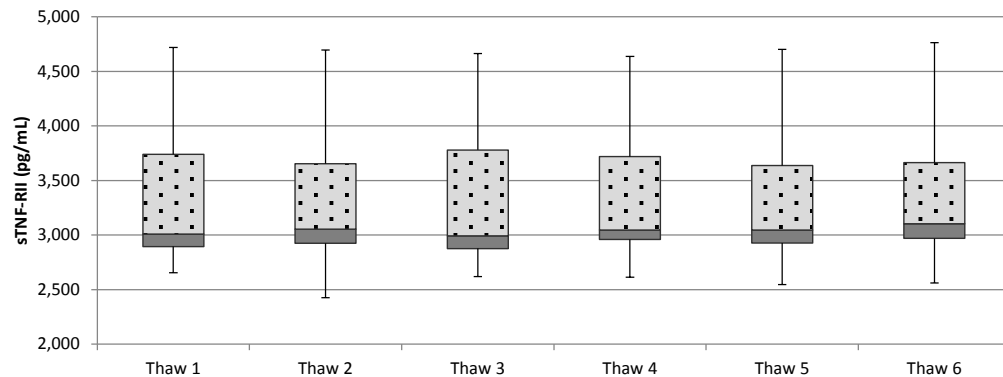


Sample Number	Thaw 1	Thaw 2	Thaw 3	Thaw 4	Thaw 5	Thaw 6
199 Serum	3,059.59	3,148.29	3,069.66	3,106.13	3,091.87	3,171.95
199 Citrate	2,655.08	2,424.82	2,620.35	2,614.27	2,547.14	2,561.05
199 EDTA	2,872.17	2,913.01	2,864.09	2,950.50	2,999.05	3,035.73
199 SCAT	2,960.12	2,960.12	2,914.62	2,987.33	2,904.43	2,947.29
200 Serum	4,719.88	4,695.72	4,664.16	4,637.52	4,702.63	4,762.24
200 Citrate	3,966.69	3,822.94	4,016.43	3,925.42	3,819.91	3,828.00
Average	3,372.26	3,327.48	3,358.22	3,370.20	3,344.17	3,384.38
Freeze/Thaw Average	3,359.45					
Freeze/Thaw Stdev	20.77					
Freeze/Thaw CV%	0.62					

TNF-RII Box Plot (Draw Tube Type)



TNF-RII Freeze-Thaw Box Plot



Range of Standard Curve: 3.05 - 50,000 pg/mL
Working Range (Range * Dilution): 15.25 - 250,000 pg/mL
Manufacturer Defined Minimum Detectable Concentration: 16.9 pg/mL
Manufacturer Defined MDC * Dilution: 84.5 pg/mL
Manufacturer Defined Intra-Assay CV% = 3.7
Manufacturer Defined Inter-Assay CV% 5.8
Manufacturer Recommended Sample Type: Serum or Plasma
Citrate, EDTA and SCAT all appear to be running very similarly. Serum is running about 9% higher than the other three analytes. Freeze/Thaw appears to be non-existent. The CV% of the averages of the thaw cycles is only 0.62%, well below the expected Intra-Assay CV%.