

## Normal Serum, Ascites, and Cell Supernatant Typical Immunoglobulin Concentration Ranges

### Normal Sera

Species	IgG (mg/ml)	IgM (mg/ml)	IgA (mg/ml)	% $\kappa/\lambda$
Human	Total: 7.5 - 22	0.2 - 2.8	0.5 - 3.4	67/33
	IgG1: 5 - 9.5			
	IgG2: 2.2 - 4.8			
	IgG3: 0.4 - 1.0			
	IgG4: 0.1 - 0.6			
Mouse	Total: 2 - 5	0.8 - 6.5	1.0 - 3.2	99/1
	IgG1: 1.2 - 5			
	IgG2a: 1.3 - 2.9			
	IgG3: no data			
Rat	Total: 5 - 7	0.6 - 1.0	0.1 - 0.2	99/1
	IgG1: ~5.85			
	IgG2a: 6.7 - 8.0			
	IgG2c: ~2.6			
Rabbit	12 - 14.5	0.3 - 0.6	0.4 - 0.8	90/10
Goat	Total: 18 - 24	0.8 - 2.0	0.1 - 0.9	1/99
	IgG1: ~10.9			
	IgG2: ~9.1			
Sheep	18 - 24	0.8 - 1.8	0.1 - 1.0	1/99
Pig	Total: 17 - 24	1.0 - 3.4	1.3 - 2.6	50/50
	IgG1: no data			
	IgG2: 8 - 17			
Bovine	Total: 9 - 24	1.9 - 3.9	0.5 - 1.2	1/99
	IgG1: 7 - 13			
	IgG2: 6 - 15			
Horse	IgG: 11.5 - 21	1.0 - 3.0	1.0 - 4.0	1/99
	IgGt: 1 - 12			

### Monoclonal Sources

Ascites	0.5 - 5.0			N/A
Cell Culture Supernatant	0.01 - 0.05			N/A