

Cytokine Neutralization with Antibodies

Mouse Cytokine Neutralization Quick Reference Guide*

Specificity	Clone	<i>In Vitro</i> (Range)	<i>In Vitro</i> References	<i>In Vivo</i> (Range)	<i>In Vivo</i> References
IL-1 α	ALF-161	(1-100 μ g/ml)	1. Fuhlbrigge, R.C., <i>et al.</i> , 1998. <i>J. Immunol.</i> 141:2643; 2. Rogers, H.W., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:1011.	200 μ g i.p./animal	1. Rogers, H.W., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:1011.
IL-1 β	B122	(1-100 μ g/ml)	1. Rogers, H.W., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:1011; 2. Hogquist, K.A., <i>et al.</i> , 1991. <i>J. Immunol.</i> 146:1534.	200 μ g i.p./animal	1. Rogers, H.W., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:1011.
IL-2	JES6-1A12	(1-20 μ g/ml)	1. Oh, S., <i>et al.</i> , 2000. <i>J. Virol.</i> 74:5460; 2. Reichmann, G., <i>et al.</i> , 1999. <i>J. Immunol.</i> 163:3354.	100 μ g i.v./animal	1. Baxevanis, C.N., <i>et al.</i> , 2003. <i>J. Immunol.</i> 171:2953.
IL-2	JES6-5H4	10 μ g/ml	1. Lohning, M., <i>et al.</i> , 2003. <i>Proc. Natl. Acad. Sci. USA</i> 100:12307.		
IL-3	MP2-8F8			2 mg/animal	1. Min, B., <i>et al.</i> , 2004. <i>J. Exp. Med.</i> 200:507.
IL-4	11B11	1 μ g/ml	1. Oh, S., <i>et al.</i> , 2000. <i>J. Virol.</i> 74:5460.	1 mg i.p./animal	1. Webb, D.C., <i>et al.</i> , 2000. <i>J. Immunol.</i> 165:108; 2. LeMoine, A., <i>et al.</i> , 1999. <i>J. Clin. Invest.</i> 103:1659.
IL-5	TRFK5	0.5 μ g/ml	1. Binder, C.J., <i>et al.</i> , 2004. <i>J. Clin. Invest.</i> 114:427.	(50 μ g–1 mg) i.p./animal or 2 mg/kg i.v./animal	1. Sitkauskiene, B., <i>et al.</i> , 2005. <i>Respiratory Res.</i> 6:33; 2. Webb, D.C., <i>et al.</i> , 2000. <i>J. Immunol.</i> 165:108; 3. LeMoine, A., <i>et al.</i> , 1999. <i>J. Clin. Invest.</i> 103:1659 [i.p. references]; 4. Blyth, D. I., <i>et al.</i> , 2000. <i>Am. J. Respir. Cell Mol. Biol.</i> 23:241 [i.v. reference]
IL-6	MP5-20F3	10 μ g/ml	1. Rogers, H.W., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:1011.		
IL-9	D9302C12			100 μ g i.p./animal	1. Sitkauskiene, B., <i>et al.</i> , 2005. <i>Respiratory Res.</i> 6:33.
IL-10	JES5-2A5	(1–10 μ g/ml)	1. Oh, S., <i>et al.</i> , 2000. <i>J. Virol.</i> 74:5460; 2. Lohning, M., <i>et al.</i> , 2003. <i>Proc. Natl. Acad. Sci. USA</i> 100:12307.	1 mg i.p./animal	1. Deepe, G.S., Jr., <i>et al.</i> , 1999. <i>J. Immunol.</i> 163:4985.
IL-10	JES5-16E3	(10–20 μ g/ml)	1. Tang, Q., <i>et al.</i> , 2004. <i>Eur. J. Immunol.</i> 34:2996; 2. Iwasaki, A., <i>et al.</i> , 1999. <i>J. Exp. Med.</i> 190:229.		
IL-12	C17.8	(5-20 μ g/ml)	1. Lohning, M., <i>et al.</i> , 2003. <i>Proc. Natl. Acad. Sci. USA</i> 100:12307; 2. Reichmann, G., <i>et al.</i> , 1999. <i>J. Immunol.</i> 163:3354.	1 mg i.p./animal	1. Blackwell, N.M., <i>et al.</i> , 2001. <i>Infect. Immun.</i> 69:3860.

Mouse Cytokine Neutralization Quick Reference Guide*

Specificity	Clone	In Vitro (Range)	In Vitro References	In Vivo (Range)	In Vivo References
GM-CSF	MP1-22E9	10 µg/ml	1. Fontt, E.O., <i>et al.</i> , 1998. <i>Infect. Immun.</i> 66:2722.	500 µg i.p./animal	1. Deepe, G.S., Jr., <i>et al.</i> , 1999. <i>J. Immunol.</i> 163:4985; 2. Wuthrich, M., <i>et al.</i> , 2002. <i>J. Immunol.</i> 169:6969.
IFN-γ	R4-6A2	(1-15 µg/ml)	1. Oh, S., <i>et al.</i> , 2000. <i>J. Virol.</i> 74:5460; 2. Ohkusu-Tsukada, K., <i>et al.</i> , 2004. <i>Mol. Cell Biol.</i> 24:6957.	(500 µg–1 mg) i.p./animal	1. Hargrave, S.L., <i>et al.</i> , 2004. <i>Invest. Ophthalmol. Vis. Sci.</i> 45:1188; 2. Chaudhri, G., <i>et al.</i> , 2004. <i>Proc. Natl. Acad. Sci. USA</i> 101:9057.
IFN-γ	XMG1.2	10 µg/ml	1. Stassen, M., <i>et al.</i> , 2004. <i>J. Immunol.</i> 173:267.	(300 µg–1 mg) i.v. or i.p./animal	1. Wuthrich, M., <i>et al.</i> , 2002. <i>J. Immunol.</i> 169:6969; 2. Zhing, W., <i>et al.</i> , 2001. <i>J. Immunol.</i> 167:1379.
MCP-1	2H5	(2.5–10 µg/ml)	1. Luo, Y., <i>et al.</i> , 1994. <i>J. Immunol.</i> 153:3708.	200 µg i.p./animal	1. Morrison, B.E., <i>et al.</i> , 2003. <i>J. Clin. Invest.</i> 112:1862.
TNF-α	MP6-XT22	25 µg/ml	1. Lahn, M., <i>et al.</i> , 1998. <i>J. Immunol.</i> 160:5221.	(1–2 mg) i.v./animal	1. Via, C.S., <i>et al.</i> , 2001. <i>J. Immunol.</i> 167:6821; 2. Chaudhri, G., <i>et al.</i> , 2004. <i>Proc. Natl. Acad. Sci. USA</i> 101:9057.
TNF-α	TN3-19.12	5 µg/ml	1. Kasahara, S., <i>et al.</i> , 2003. <i>J. Virol.</i> 77:2469.	(100–500 µg) i.p./animal	1. Yang, X.-D., <i>et al.</i> , 1994. <i>J. Exp. Med.</i> 180:995; 2. Williams, R.O., <i>et al.</i> , 1992. <i>Proc. Natl. Acad. Sci. USA</i> 89:9784.

Human Cytokine Neutralization Quick Reference Guide*

Specificity	Clone	In Vitro (Range)	In Vitro References
IL-2	MQ1-17H12	20 µg/ml	1. Yi, Y., <i>et al.</i> , 2000. <i>J. Immunol.</i> 165:6627.
IL-4	MP4-25D2	5 µg/ml	1. Kim, J.R., <i>et al.</i> , 2005. <i>BMC Immunol.</i> 6:3; 2. Hoffmann, P., <i>et al.</i> , 2004. <i>Blood</i> 104:895.
IL-5	JES1-39D10	(0.1–1 µg/ml)	1. Denburg, J.A., <i>et al.</i> , 1991. <i>Blood</i> 77:1462.
IL-5	TRFK5	2.5 µg/ml	1. Li, Y., <i>et al.</i> , 1998. <i>J. Immunol.</i> 161:7007.
IL-6	MQ2-13A5	(1–5 µg/ml)	1. Zou, J.-P., <i>et al.</i> , 1999. <i>J. Immunol.</i> 162:4882; 2. Wyant, T.L., <i>et al.</i> , 1999. <i>Infect. Immun.</i> 67:1338.
IL-9	MH9A3	1 µg/ml	1. Gounni, A.S., <i>et al.</i> , 2004. <i>J. Immunol.</i> 173:2771.
IL-10	JES3-19F1	(0.5–10 µg/ml)	1. Zou, J.-P., <i>et al.</i> , 1999. <i>J. Immunol.</i> 162:4882; 2. Akasaki, A., <i>et al.</i> 2004. <i>J. Immunol.</i> 173:4352.
IL-10	JES3-9D7	2 µg/ml	1. Othieno, C., <i>et al.</i> , 1999. <i>Infect. Immun.</i> 67:5730.
IL-12/23 p40	C8.6	10 µg/ml	1. Liu, A., <i>et al.</i> , 2005. <i>Blood</i> 105:1606.
IL-12/23 p40	C11.5	(1–5 µg/ml)	1. Bolovan-Fritts, C.A., <i>et al.</i> , 2004. <i>J. Virol.</i> 78:13173.
GM-CSF	BVD2-23B6	1 µg/ml	1. Scheuerer, B., <i>et al.</i> , 2000. <i>Blood</i> 95:1158.
IFN-γ	B27	20 µg/ml	1. Bolovan-Fritts, C.A., <i>et al.</i> , 2004. <i>J. Virol.</i> 78:13173.
IFN-γ	NIB42	1 µg/ml	1. Li, Y., <i>et al.</i> , 1998. <i>J. Immunol.</i> 161:7007.
MCP-1	2H5	(2.5–10 µg/ml)	1. Luo, Y., <i>et al.</i> , 1994. <i>J. Immunol.</i> 153:3708.
TNF-α	MAb1	(1–5 µg/ml)	1. Wyant, T. L., <i>et al.</i> , 1999. <i>Infect. Immun.</i> 67:1338.
TWEAK	CARL-1	10 µg/ml	1. Nakayama, M., <i>et al.</i> , 2000. <i>J. Exp. Med.</i> 192:1373.

* The concentration of antibody effective for neutralization depends on the target cell and conditions. The user should determine the specific concentration required for their application by performing a dose titration. Times for in vitro neutralization vary, but usually require 24-48 hrs of cell culture. In vivo neutralization usually requires multiple doses of antibody given over a period of time; the concentrations shown reflect the amount of antibody given in a single dose. Please refer to specific references for additional information.