

**AVAILABLE REAGENTS FOR CATFISH**

**Recombinant proteins (cytokines & chemokines) : none available**

**Monoclonal antibodies (mAb):\***

<b>REAGENT</b>	<b>NAME</b>	<b>REFERENCE</b>	<b>SOURCE</b>
Anti-IgH $\mu$ chain (2 mAbs available)	9E1	[1]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-IgH $\delta$ chain sec	2E5	[2]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-IgH $\delta$ chain	7D11	unpublished	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-IgL chain F type	3F12	[3]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-IgL chain G type (2 mAbs available)	11A2, 1G7	[3]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-LFA1	1H5	[4]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-cytotoxic T cell and NK cell marker)	CC41	[5]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-thrombocyte (putative CD41/C61)	4-20, 7-2	[6]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-CD45 (2mAbs available)	SF8, HB4	unpublished	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-T cell lineage marker (subpopulations of T & NK cells)	CFT1	[7]	Norm Miller et al. – University of Mississippi Medical Center (nmiller@microbio.umsmed.edu)
Anti-neutrophils			Ainsworth –Mississippi State University
Anti-NCCRP1	5C6	[8,9]	Harlan Bioproducts

\*The above mAbs are known to be readily available to all that want them. There are other mAbs that have been developed but they are either not readily available or have not been fully characterized.

**References**

1. Miller NW, Bly JE, van Ginkel F, Ellsaesser CF, Clem LW. Phylogeny of lymphocyte heterogeneity: identification and separation of functionally distinct subpopulations of channel catfish lymphocytes with monoclonal antibodies. *Dev Comp Immunol* 1987; 11(4):739-747
2. Bengtén E, Quiniou SM, Stuge TB, Katagiri T, Miller NW, Clem LW, Warr GW, Wilson M. The IgH locus of the channel catfish, *Ictalurus punctatus*, contains multiple constant region gene sequences: different genes encode heavy chains of membrane and secreted IgD. *J Immunol* 2002; 169(5):2488-2497.
3. Lobb CJ, Olson MO, Clem LW. Immunoglobulin light chain classes in a teleost fish. *J Immunol* 1984; 132(4): 1917-1923.
4. Yoshida SH, Stuge TB, Miller NW, Clem LW. Phylogeny of lymphocyte heterogeneity: cytotoxic activity of channel catfish peripheral blood leukocytes directed against allogeneic targets. *Dev Comp Immunol* 1995;19(1): 71-77.
5. Shen L, Stuge TB, Bengten E, Wilson M, Chinchar VG, Naftel JP, Bernanke JM, Clem LW, Miller NW. Identification and characterization of clonal NK-like cells from channel catfish (*Ictalurus punctatus*). *Dev Comp Immunol* 2004; 28(2):139-152.
6. Passer BJ, Chen CH, Miller NW, Cooper MD. Catfish thrombocytes express an integrin-like CD41/CD61 complex. *Exp Cell Res* 1997; 234(2):347-353.
7. Passer BJ, Chen CH, Miller NW, Cooper MD. Identification of a T lineage antigen in the catfish. *Dev Comp Immunol* 1996; 20(6):441-450.
8. Jaso-Friedmann L, Leary JH, 3rd, Evans DL. NCCRP-1: a novel receptor protein sequenced from teleost nonspecific cytotoxic cells. *Mol Immunol* 1997; 34(12-13):955-965.
9. Evans DL, Jaso-Friedmann L, Smith EE, Jr., St John A, Koren HS, Harris DT. Identification of a putative antigen receptor on fish nonspecific cytotoxic cells with monoclonal antibodies. *J Immunol* 1988; 141(1):324-332.