

# **TECHNICAL DATA SHEET**

# violetFluor™ 500 Anti-Human/Mouse CD44 (IM7)

Catalog Number: 85-0441

# PRODUCT INFORMATION

Contents: violetFluor™ 500 Anti-Human/Mouse CD44 (IM7)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

Clone: IM7

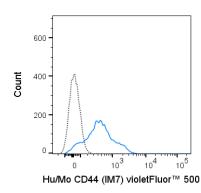
Reactivity: Human, Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C protected from light

10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, Formulation:

0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.5 ug violetFluor™ 500 Anti-Hu/Mo CD44 (85-0441) (solid line) or 0.5 ug violetFluor™ 500 Rat IgG2b isotype control (dashed line).

Rev. 20200123

### **DESCRIPTION**

The IM7 antibody recognizes CD44, a ubiquitously expressed cell surface receptor which is important for extracellular matrix organization, cell-cell and cell-matrix adhesion and migration. CD44 may be expressed in a number of different isoforms (splice variants) from the most typical or "standard" form, known as CD44s, to variants designated CD44v, e.g. CD44v1 or CD44v6. These receptors interact with several ligands, but most often associate with an extracellular matrix component hyaluronate, through which it mediates adhesion. The IM7 antibody may be used for detection of all isoforms of CD44, as it recognizes constant epitopes near the extracellular proximal domain. (Xu et al, 2002, J. Leukoc. Biol. 72:1133-1141). It has been reported to be cross-reactive with many non-human species including Baboon, Chimpanzee, Cynomolgus, Rhesus, Horse, Cow, Pig, Dog and Cat CD44.

## **PREPARATION & STORAGE**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

# **APPLICATION NOTES**

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

violetFluor 500 dye is excited by the violet (405 nm) laser and has a peak emission of 500 nm. The recommended band pass filter for this dye is 525/20. violetFluor™ 500 can be used as an alternative for BD Horizon™ V500, eFluor® 506 or Pacific Orange®.

Chandler HL, Haeussler DJ, Gemensky-Metzler AJ, Wilkie DA, and Lutz EA. 2012. Invest. Ophthalmol. Vis. Sci. 53:1835-1845. (in vitro blocking, canine) Lee L-F, Logronio K, Tu GH, Zhai W, Ni I, Mei L, Dilley J, Yu J, et al. 2012. Proc. Natl. Acad. Sci. 10.1073. (Flow cytometry).

Ruffell B, Poon GFT, Lee SSM, Brown KL, Tjew S-L, Cooper J, and Johnson P. 2011. J. Biol. Chem. 286:19179-19190. (Immunoprecipitation)

Miyake Y, Matsumoto H, Yokoo M, Miyazawa K et al. 2006. Biol. Reprod. 74: 501-510. (Immunohistochemistry - frozen tissue, swine)

Veir JK, Lappin MR, and Dow SW. 2006. Journal of Feline Medicine and Surgery. 8:400-411. (Flow cytometry - feline)

Frank NY, Margaryan A, Huang Y, Schatton T, Waaga-Gasser AM, Gasser M, Sayegh MH, Sadee W, and Frank MH. 2005. Cancer Res. 65:4320-4333. (Immunohistochemistry – frozen tissue)

Fischer A, Schumacher N, Maier M, Sendtner M, and Gessler M. 2004. Genes & Dev. 18:901-911. (Immunohistochemistry – paraffin embedded tissue) Xu H, Manivannan A, Liversidge J, Sharp PF, Forrester JV, and Crane IJ. 2002. J. Leukoc. Biol. 72:1133-1141. (in vivo functional assays, induction of apoptosis) Si-Tahar M, Sitaraman S, Shibahara T, and Madara JL. 2001. Am. J. Physiol. Cell Physiol. 280:C423-C432. (in vitro functional assays, Western Blot)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.