TONBO biosciences

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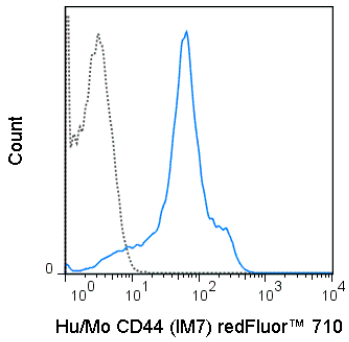
TECHNICAL DATA SHEET

redFluor™ 710 Anti-Human/Mouse CD44 (IM7)

Catalog Number: 80-0441

PRODUCT INFORMATION

Contents:	redFluor™ 710 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
Formulation:	10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.5 ug redFluor™ 710 Anti-Hu/Mo CD44 (80-0441) (solid line) or 0.5 ug redFluor™ 100 Rat IgG2b isotype control (dashed line).

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). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

redFluor™ 710 dye is excited by the red (633-647 nm) laser and has a peak emission of 710 nm. The recommended band pass filter for this dye is 710/50. redFluor™ 710 can be used as an alternative for Alexa Fluor® 700. Confirm that your cytometer is configured to detect this fluorochrome.

REFERENCES

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.