

CD44 (156-3C11) Mouse mAb (Pacific Blue™ Conjugate)



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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity	Isotype
F Endogenous	H	Mouse IgG2a

Description: This Cell Signaling Technology antibody is conjugated to Pacific Blue™ fluorescent dye and tested in-house for direct flow cytometry in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated CD44 (156-3C11) Mouse mAb #3570.

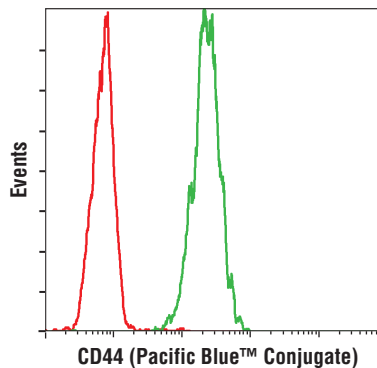
Background: CD44 is a type I transmembrane glycoprotein that mediates cell-cell and cell-matrix interaction through its affinity for hyaluronic acid (HA) and possibly through other parts of the extracellular matrix (ECM). CD44 is highly polymorphic, possesses a number of alternative splice variants and undergoes extensive post-translational modifications (1,2). Increased surface levels of CD44 are characteristic of T cell activation, and expression of the protein is upregulated during the inflammatory response. Research studies have shown that interactions between CD44 and HER2 are linked to an increase in ovarian carcinoma cell growth (1-3). CD44 interacts with ezrin, radixin and moesin (ERM), linking the actin cytoskeleton to the plasma membrane and the ECM (4-6). CD44 is constitutively phosphorylated at Ser325 in resting cells. Activation of PKC results in phosphorylation of Ser291, dephosphorylation of Ser325, disassociation of ezrin from CD44, and directional motility (4).

Specificity/Sensitivity: CD44 (156-3C11) Mouse mAb (Pacific Blue™ Conjugate) recognizes endogenous levels of total CD44 protein.

Source/Purification: Monoclonal antibody is produced by immunizing BALB/c mice with stimulated human leukocytes and recognizes residues surrounding Ser210 of human CD44

Background References:

- (1) Goodison, S. et al. (1999) *Mol. Pathol.* 52, 189-196.
- (2) Cichy, J. and Puré, E. (2003) *J. Cell Biol.* 161, 839-843.
- (3) Bourguignon, L.Y. et al. (1997) *J. Biol. Chem.* 272, 27913-27918.
- (4) Legg, J.W. et al. (2002) *Nat. Cell Biol.* 4, 399-407.
- (5) Yonemura, S. et al. (1998) *J. Cell Biol.* 140, 885-895.
- (6) Tsukita, S. et al. (1994) *J. Cell Biol.* 126, 391-401.



Flow cytometric analysis of HeLa cells using CD44 (156-3C11) Mouse mAb (Pacific Blue™ Conjugate) (green) compared to a nonspecific negative control antibody (red).

Entrez-Gene ID #960
Swiss-Prot Acc. #P16070

Storage: Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. *Do not aliquot the antibody. Protect from light. Do not freeze.*

Recommended Antibody Dilutions:

Flow Cytometry 1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

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