Revision 3

Store at +4C

#8724

CD44 (156-3C11) Mouse mAb (PE Conjugate)

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
FC-FP, FC-L	H	Endogenous	Mouse IgG2a	#P16070	960

Product Usage Information

Application	Dilution
Flow Cytometry (Fixed/Permeabilized)	1:50
Flow Cytometry (Live)	1:50

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 antibodies. Protect from light. Do not freeze.

Specificity/Sensitivity

CD44 (156-3C11) Mouse mAb detects 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

Description

This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis 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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

FC-FP: Flow Cytometry (Fixed/Permeabilized) **FC-L:** Flow Cytometry (Live)

Cross-Reactivity Key

H: Human

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Limited Uses

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