

Store at -20°C  
#4041

## CD44 (156-3C11) Mouse mAb (Biotinylated)



**Cell Signaling**  
TECHNOLOGY®

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

Applications: WB	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 80	Source/Isotype: Mouse IgG2a	UniProt ID: #P16070	Entrez-Gene Id: 960
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibodies.	
<b>Specificity / Sensitivity</b>	CD44 (156-3C11) Mouse mAb (Biotinylated) detects endogenous levels of total CD44 protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing BALB/c mice with stimulated human leukocytes and recognizes residues surrounding Ser210 of human CD44	
<b>Product Description</b>	This Cell Signaling Technology antibody is conjugated to biotin under optimal conditions. The biotinylated antibody exhibits the same species cross-reactivity as the unconjugated CD44 (156-3C11) Mouse mAb #3570.	

MW (kDa)

80

### 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

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

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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