

CD44 Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

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

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W	H	80 kDa	Rabbit**
Endogenous			

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. Interactions between CD44 and HER2 have been linked to an increase in ovarian carcinoma cell growth (1-3).

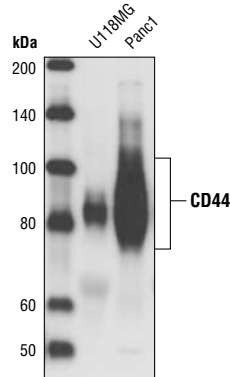
CD44 interacts with ezrin, radixin and moesin (ERM), linking the actin cytoskeleton to the plasma membrane and the ECM (4-6). CD44 is constitutively phosphorylated at Ser325 in resting cells. Activation of PKC results in phosphorylation of Ser291, dephosphorylation of Ser325, disassociation of ezrin from CD44, and directional motility (4).

Specificity/Sensitivity: CD44 Antibody detects endogenous levels of total CD44 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) surrounding Leu135 of human CD44. Antibodies are purified by peptide affinity chromatography.

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.



Western blot analysis of extracts from U118MG and Panc1 cells using CD44 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application 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 companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.