Store at -20°C

#8486

RUNX2 (D1H7) Rabbit mAb

Cell Signaling TECHNOLOGY®

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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New 11/11

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.

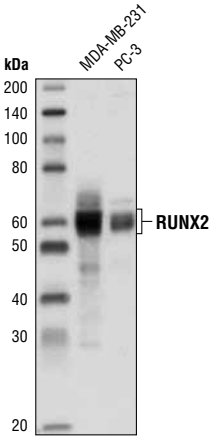
Entrez-Gene ID #860
Swiss-Prot Acc. #Q13950

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP	H, M, R, Mk	55-62 kDa	Rabbit IgG**
Endogenous			

Background: RUNX2 is a member of the RUNX family of transcription factors. It is involved in osteoblast differentiation and skeletal morphogenesis. RUNX2 regulates the transcription of various genes including osteopontin, bone sialoprotein, and osteocalcin via binding to the core site of the enhancers or promoters (1-3). RUNX2 is crucial for the maturation of osteoblasts and both intramembranous and endochondral ossification. Mutations in RUNX2 have been associated with the bone development disorder cleidocranial dysplasia (CCD) (4-6). RUNX2 is also abnormally expressed in various human cancers including prostate cancer and breast cancer. It plays an important role in migration, invasion, and bone metastasis of prostate and breast cancer cells (7-10).

Specificity/Sensitivity: RUNX2 (D1H7) Rabbit mAb recognizes endogenous levels of total RUNX2 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg267 of human RUNX2 protein.



Western blot analysis of extracts from MDA-MB-231 and PC-3 cells using RUNX2 (D1H7) Rabbit mAb.

Background References:

(1) Viereck, V. et al. (2002) *J Cell Biochem* 86, 348-56.
(2) Willis, D.M. et al. (2002) *J Biol Chem* 277, 37280-91.
(3) Tu, Q. et al. (2008) *J Cell Physiol* 217, 40-7.
(4) Quack, I. et al. (1999) *Am J Hum Genet* 65, 1268-78.
(5) Cardoso, B.M. et al. (2010) *Clin Dysmorphol* 19, 150-2.
(6) Han, M.S. et al. (2010) *J Cell Biochem* 110, 97-103.
(7) Akech, J. et al. (2010) *Oncogene* 29, 811-21.
(8) van der Deen, M. et al. (2010) *J Cell Biochem* 109, 828-37.
(9) Barnes, G.L. et al. (2003) *Cancer Res* 63, 2631-7.
(10) Barnes, G.L. et al. (2004) *Cancer Res* 64, 4506-13.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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
Immunoprecipitation	1:50

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 nonfat dry milk, 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.

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