

#8486 Store at -20C

RUNX2 (D1H7) Rabbit mAb


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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, ChIP	H M R Mk	Endogenous	55-62	Rabbit IgG	#Q13950	860

Product Usage Information

For optimal ChIP results, use 5 µl of antibody and 10 µg of chromatin (approximately 4 x 10⁶ cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Chromatin IP	1:100

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.

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.

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).

Background References

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

Species Reactivity

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

Western Blot Buffer

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.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **ChIP:** Chromatin IP

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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