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RUNX2 Antibody (S533) Blocking peptide
Synthetic peptide
Catalog # BP7735d

Specification

RUNX2 Antibody (S533) Blocking peptide - Product Information

Primary Accession Q13950

RUNX2 Antibody (S533) Blocking peptide - Additional Information

Gene ID 860

Other Names
Runt-related transcription factor 2, Acute myeloid leukemia 3 protein, Core-binding factor subunit alpha-1, CBF-alpha-1, Oncogene AML-3, Osteoblast-specific transcription factor 2, OSF-2, Polyomavirus enhancer-binding protein 2 alpha A subunit, PEA2-alpha A, PEBP2-alpha A, SL3-3 enhancer factor 1 alpha A subunit, SL3/AKV core-binding factor alpha A subunit, RUNX2, AML3, CBFA1, OSF2, PEBP2A

Target/Specificity
The synthetic peptide sequence used to generate the antibody <a >AP7735d was selected from the S465 region of human RUNX2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RUNX2 Antibody (S533) Blocking peptide - Protein Information

Name RUNX2

Synonyms AML3, CBFA1, OSF2, PEBP2A

Function
Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis (PubMed:28505335, PubMed:28738062, PubMed:28703881). Essential for the maturation of osteoblasts and both intramembranous and endochondral ossification. CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, osteocalcin,

osteopontin, bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters. In osteoblasts, supports transcription activation: synergizes with SPEN/MINT to enhance FGFR2-mediated activation of the osteocalcin FGF-responsive element (OCFRE) (By similarity). Inhibits KAT6B-dependent transcriptional activation.

Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q08775}

Tissue Location
Specifically expressed in osteoblasts.

RUNX2 Antibody (S533) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

RUNX2 Antibody (S533) Blocking peptide - Images

RUNX2 Antibody (S533) Blocking peptide - Background

Runx2 is a member of the RUNX family of transcription factors. It is a nuclear protein with an Runt DNA-binding domain. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. It can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Mutations in the Runx2 gene have been associated with the bone development disorder cleidocranial dysplasia (CCD).

RUNX2 Antibody (S533) Blocking peptide - References

Rich,J.T., Biochem. Biophys. Res. Commun. 372 (1), 230-235 (2008)Ermakov,S., Ann. Hum. Genet. 72 (PT 4), 510-518 (2008)Endo,T., J. Clin. Endocrinol. Metab. 93 (6), 2409-2412 (2008)