

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

RUNX2 Antibody (S533) Blocking peptide - Product InformationPrimary 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 [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](http://www.uniprot.org/citations/28505335), PubMed: [28738062](http://www.uniprot.org/citations/28738062), PubMed: [28703881](http://www.uniprot.org/citations/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)