

RUNX3 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14667c**Specification**

RUNX3 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q13761](#)**RUNX3 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 864**Other Names**

Runt-related transcription factor 3, Acute myeloid leukemia 2 protein, Core-binding factor subunit alpha-3, CBF-alpha-3, Oncogene AML-2, Polyomavirus enhancer-binding protein 2 alpha C subunit, PEA2-alpha C, PEBP2-alpha C, SL3-3 enhancer factor 1 alpha C subunit, SL3/AKV core-binding factor alpha C subunit, RUNX3, AML2, CBFA3, PEBP2A3

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.

RUNX3 Antibody (Center) Blocking Peptide - Protein Information**Name** RUNX3**Synonyms** AML2, CBFA3, PEBP2A3**Function**

Forms the heterodimeric complex core-binding factor (CBF) with CBFB. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'- TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (By similarity). May be involved in the control of cellular proliferation and/or differentiation. In association with ZFHX3, up- regulates CDKN1A promoter activity following TGF-beta stimulation (PubMed:20599712). CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation. CBF complexes binding to the transcriptional silencer is

essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00399, ECO:0000269|PubMed:20100835, ECO:0000269|PubMed:20599712}. Cytoplasm. Note=The tyrosine phosphorylated form localizes to the cytoplasm. Translocates from the cytoplasm to the nucleus following TGF-beta stimulation

Tissue Location

Expressed in gastric cancer tissues (at protein level).

RUNX3 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RUNX3 Antibody (Center) Blocking Peptide - Images**RUNX3 Antibody (Center) Blocking Peptide - Background**

This gene encodes a member of the runt domain-containing family of transcription factors. A heterodimer of this protein and a beta subunit forms a complex that binds to the core DNA sequence 5'-PYGPYGGT-3' found in a number of enhancers and promoters, and can either activate or suppress transcription. It also interacts with other transcription factors. It functions as a tumor suppressor, and the gene is frequently deleted or transcriptionally silenced in cancer. Multiple transcript variants encoding different isoforms have been found for this gene.

RUNX3 Antibody (Center) Blocking Peptide - References

Tsang, Y.H., et al. Oncogene 29(41):5643-5650(2010) Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Iwatani, K., et al. Biochem. Biophys. Res. Commun. 400(3):426-431(2010) Kodach, L.L., et al. Carcinogenesis 31(9):1567-1575(2010) Nishio, M., et al. Anticancer Res. 30(7):2673-2682(2010)