

RUNX3 Antibody (clone 2B3)
Mouse Monoclonal Antibody
Catalog # ALS16876**Specification**

RUNX3 Antibody (clone 2B3) - Product Information

Application	IHC, WB, E
Primary Accession	Q13761
Other Accession	864
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	44356

RUNX3 Antibody (clone 2B3) - Additional Information**Gene ID** 864**Other Names**

RUNX3, Acute myeloid leukemia gene 2, CBF-alpha-3, PEA2 alpha C, PEBP2 alpha C, PEBP2-alpha C, PEBP2A3, PEBP2aC, AML2, Oncogene AML-2, CBFA3, PEA2-alpha C, Transcription factor AML2

Target/Specificity

Human RUNX3

Reconstitution & Storage

PBS, 0.05% sodium azide, 0.5% protein stabilizer. Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

RUNX3 Antibody (clone 2B3) is for research use only and not for use in diagnostic or therapeutic procedures.

RUNX3 Antibody (clone 2B3) - 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

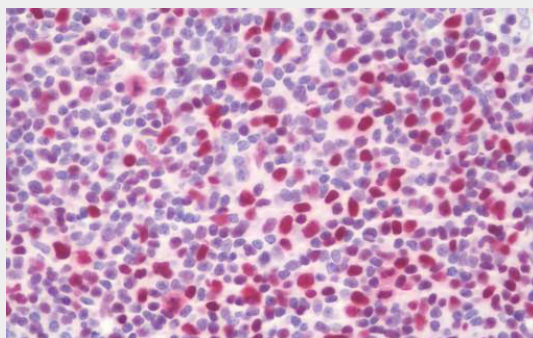
Expressed in gastric cancer tissues (at protein level).

RUNX3 Antibody (clone 2B3) - Protocols

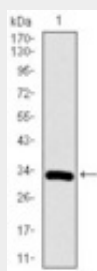
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

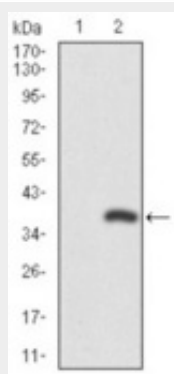
RUNX3 Antibody (clone 2B3) - Images



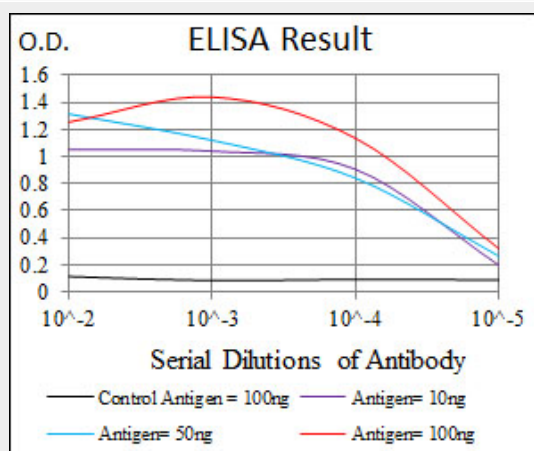
Anti-RUNX3 antibody IHC staining of human tonsil.



Western blot using RUNX3 monoclonal antibody against human RUNX3 recombinant protein.



Western blot using RUNX3 monoclonal antibody against HEK293 (1) and RUNX3 (AA: 186-252)-hlgGFc...



Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);

RUNX3 Antibody (clone 2B3) - Background

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, Ick, IL-3 and GM-CSF promoters.

RUNX3 Antibody (clone 2B3) - References

- Bae S.-C., et al. Gene 159:245-248(1995).
- Levanon D., et al. Genomics 23:425-432(1994).
- Groner Y., et al. Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.
- Gregory S.G., et al. Nature 441:315-321(2006).
- Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.