10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

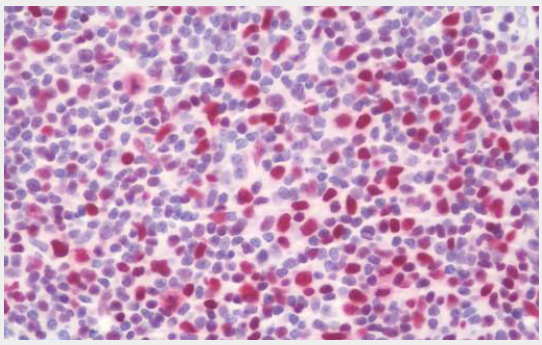
Tissue Location
Expressed in gastric cancer tissues (at protein level).

RUNX3 Antibody (clone 2B3) - Protocols

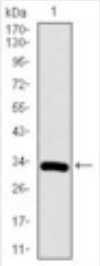
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RUNX3 Antibody (clone 2B3) - Images

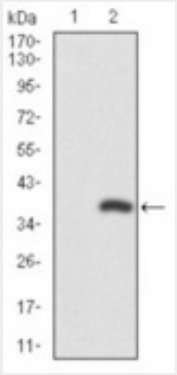


Anti-RUNX3 antibody IHC staining of human tonsil.

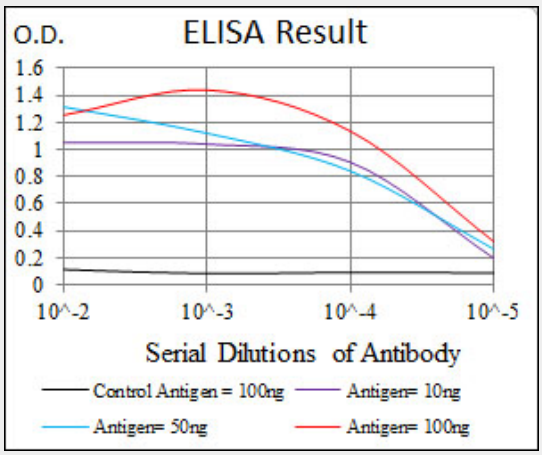


10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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)-hIgGFc...



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, lck, 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.