

Anti-RUNX3 Picoband Antibody
Catalog # ABO12122**Specification****Anti-RUNX3 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	Q13761
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Runt-related transcription factor 3(RUNX3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-RUNX3 Picoband Antibody - 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

Calculated MW

44356 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Nucleus . Cytoplasm . The tyrosine phosphorylated form localizes to the cytoplasm.

Protein Name

Runt-related transcription factor 3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human RUNX3 recombinant protein (Position: M128-Y270). Human RUNX3 shares 93% amino acid (aa) sequence identity with mouse RUNX3.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-RUNX3 Picoband Antibody - Protein Information

Name RUNX3

Synonyms AML2, CBFA3, PEBP2A3

Function

Forms the heterodimeric complex core-binding factor (CBF) with CBFβ. 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 CBFβ 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 ZFX3, up-regulates CDKN1A promoter activity following TGF-β 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). Necessary for the development and survival of sensory neurons expressing parvalbumin (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-β stimulation

Tissue Location

Expressed in gastric cancer tissues (at protein level).

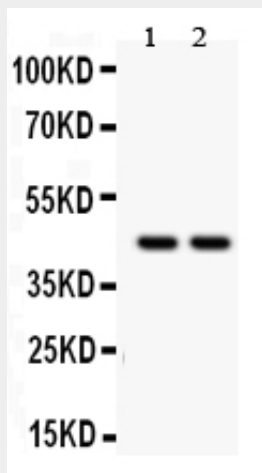
Anti-RUNX3 Picoband Antibody - Protocols

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

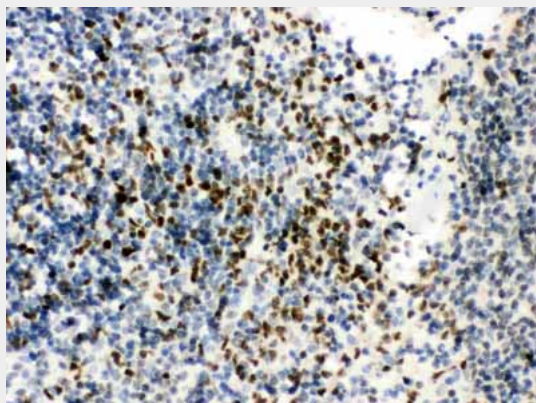
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

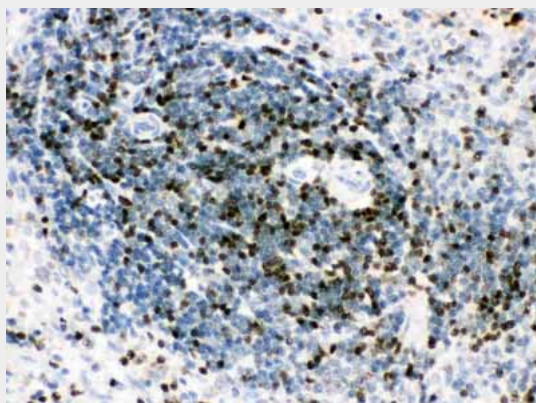
Anti-RUNX3 Picoband Antibody - Images



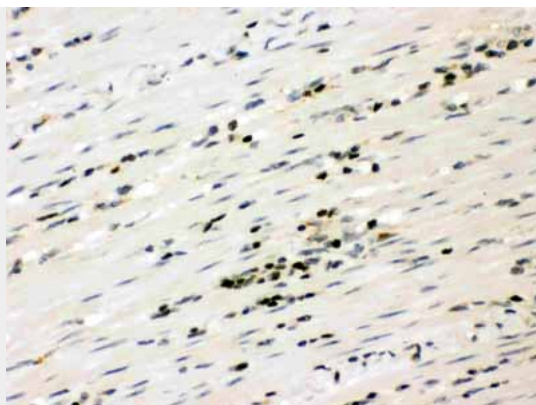
Anti- RUNX3 Picoband antibody, ABO12122, Western blotting
All lanes: Anti RUNX3 (ABO12122) at 0.5ug/ml
Lane 1: A431 Whole Cell Lysate at 40ug
Lane 2: U20S Whole Cell Lysate at 40ug
Predicted bind size: 44KD
Observed bind size: 44KD



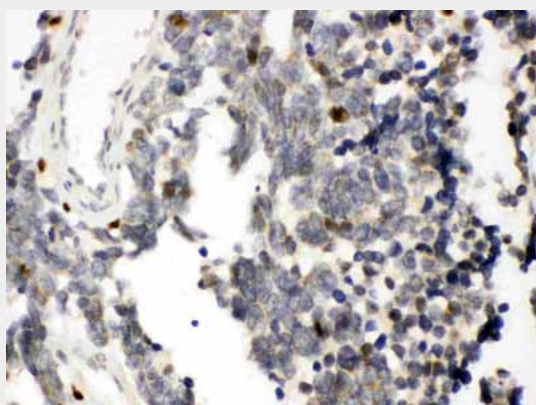
Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)
IHC(P): Mouse Spleen Tissue



Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)
IHC(P): Rat Spleen Tissue



Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-RUNX3 Picoband Antibody - Background

Runt-related transcription factor 3, also called AML2 is a protein that in humans is encoded by the RUNX3 gene. The RUNX3 gene encodes a Runt-related transcription factor, which is part of the RUNX gene family. By fluorescence in situ hybridization, RUNX3 was assigned to human chromosome 1p36.11. RUNX3 binds to the core site of murine Leukemia virus, the core sequences in the enhancer of the polyomavirus, and also to the enhancers of the T-cell receptor genes. It may be involved in the control of cellular proliferation and/or differentiation.