

### **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 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  $\mu$ g/ml, Human, Mouse, Rat, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>

#### **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 NaN3.

### **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 r°Constitution, 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 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:<a href="http://www.uniprot.org/citations/20599712" target=" blank">20599712</a>). 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-beta stimulation

#### **Tissue Location**

Expressed in gastric cancer tissues (at protein level).

## **Anti-RUNX3 Picoband Antibody - Protocols**

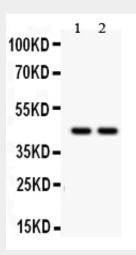
Provided below are standard protocols that you may find useful for product applications.

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

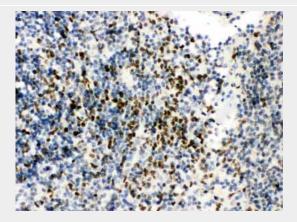


## • Cell Culture

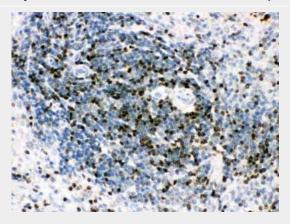
# **Anti-RUNX3 Picoband Antibody - Images**



Anti- RUNX3 Picoband antibody, ABO12122, Western blottingAll lanes: Anti RUNX3 (ABO12122) at 0.5ug/mlLane 1: A431 Whole Cell Lysate at 40ugLane 2: U20S Whole Cell Lysate at 40ugPredicted bind size: 44KDObserved bind size: 44KD

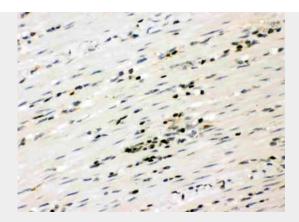


Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)IHC(P): Mouse Spleen Tissue

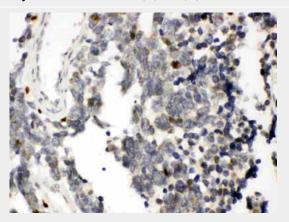


Anti- RUNX3 Picoband antibody, ABO12122, IHC(P)IHC(P): Rat Spleen Tissue





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.