

**RUNX3**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2535a**

**Specification**

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**RUNX3 - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | <b>E, WB</b>           |
| Primary Accession | <a href="#">Q13761</a> |
| Reactivity        | <b>Human</b>           |
| Host              | <b>Mouse</b>           |
| Clonality         | <b>Monoclonal</b>      |
| Isotype           | <b>Mouse IgG1</b>      |
| Calculated MW     | <b>44.4kDa KDa</b>     |

**Immunogen**

Purified recombinant fragment of human RUNX3 (AA: 294-429) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**RUNX3 - Additional Information**

**Gene ID** 864

**Other Names**

AML2; CBFA3; PEBP2aC

**Dilution**

E~~ 1/10000

WB~~ 1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RUNX3 is for research use only and not for use in diagnostic or therapeutic procedures.

**RUNX3 - 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 CBF $\beta$  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- $\beta$  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).

#### 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 - 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 - Images

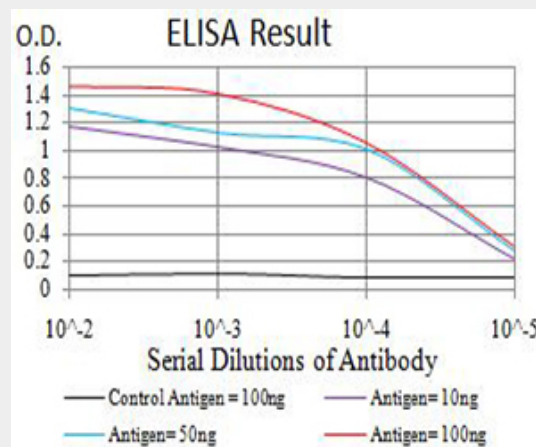


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

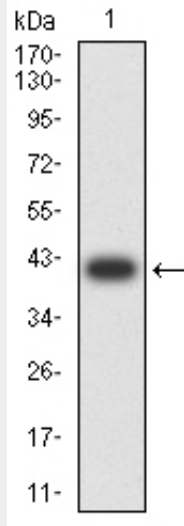


Figure 2:Western blot analysis using RUNX3 mAb against human RUNX3 (AA: 294-429) recombinant protein. (Expected MW is 40 kDa)

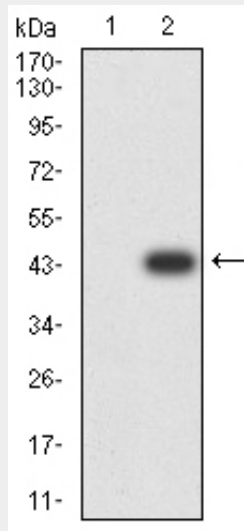


Figure 3:Western blot analysis using RUNX3 mAb against HEK293 (1) and RUNX3 (AA: 294-429)-hlgGfC transfected HEK293 (2) cell lysate.

### **RUNX3 - References**

- 1.Genet Mol Res. 2015 Dec 1;14(4):15505-10.2.J Pathol. 2015 Dec;237(4):520-31.