

**RUNX2 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant RUNX2.****Catalog # AT3741a****Specification**

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**RUNX2 Antibody (monoclonal) (M01) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | IF, WB, IHC, E            |
| Primary Accession | <a href="#">Q13950</a>    |
| Other Accession   | <a href="#">NM_004348</a> |
| Reactivity        | Human                     |
| Host              | mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG2b                     |
| Calculated MW     | 56648                     |

**RUNX2 Antibody (monoclonal) (M01) - Additional Information****Gene ID** 860**Other Names**

Runt-related transcription factor 2, Acute myeloid leukemia 3 protein, Core-binding factor subunit alpha-1, CBF-alpha-1, Oncogene AML-3, Osteoblast-specific transcription factor 2, OSF-2, Polyomavirus enhancer-binding protein 2 alpha A subunit, PEA2-alpha A, PEBP2-alpha A, SL3-3 enhancer factor 1 alpha A subunit, SL3/AKV core-binding factor alpha A subunit, RUNX2, AML3, CBFA1, OSF2, PEBP2A

**Target/Specificity**

RUNX2 (NP\_004339, 251 a.a. ~ 350 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

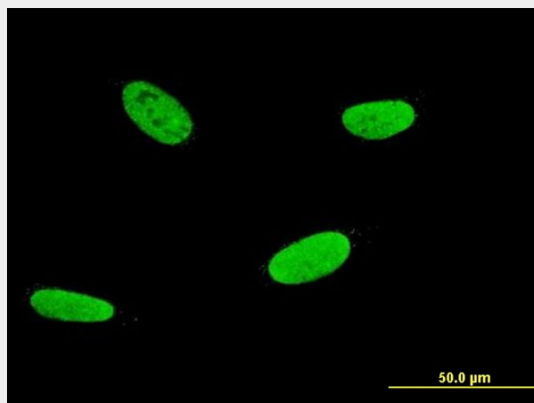
RUNX2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

**RUNX2 Antibody (monoclonal) (M01) - Protocols**

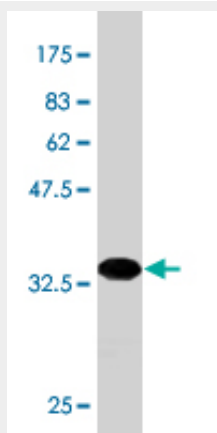
Provided below are standard protocols that you may find useful for product applications.

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

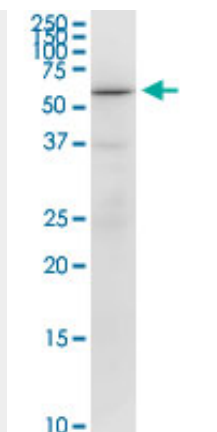
#### **RUNX2 Antibody (monoclonal) (M01) - Images**



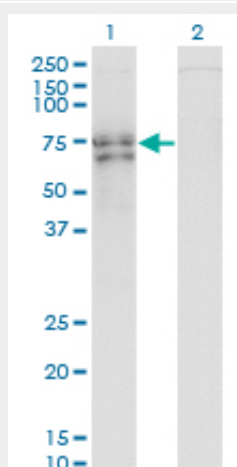
Immunofluorescence of monoclonal antibody to RUNX2 on U-2 OS cell . [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



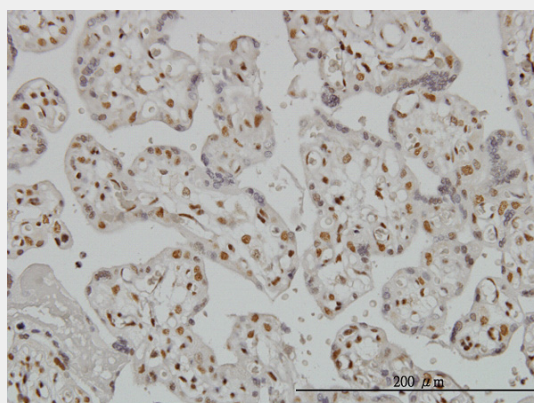
RUNX2 monoclonal antibody (M01), clone 1D8. Western Blot analysis of RUNX2 expression in Jurkat.



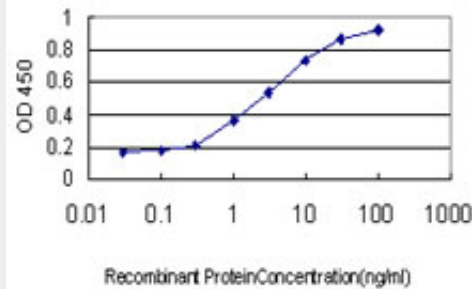
Western Blot analysis of RUNX2 expression in transfected 293T cell line by RUNX2 monoclonal antibody (M01), clone 1D8.

Lane 1: RUNX2 transfected lysate (Predicted MW: 60.28 KDa).

Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to RUNX2 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged RUNX2 is approximately 0.03ng/ml as a capture antibody.

### **RUNX2 Antibody (monoclonal) (M01) - Background**

This gene is a member of the RUNX family of transcription factors and encodes a nuclear protein with an Runt DNA-binding domain. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. The protein can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Mutations in this gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing.

### **RUNX2 Antibody (monoclonal) (M01) - References**

1. Processing large-diameter poly(L-lactic acid) microfiber mesh/mesenchymal stromal cell constructs via resin embedding: an efficient histologic method. D'Alessandro D, Pertici G, Moscato S, Metelli MR, Danti S, Nesti C, Berrettini S, Petrini M, Danti S. *Biomed Mater*. 2014 Aug;9(4):045007. doi: 10.1088/1748-6041/9/4/045007. Epub 2014 Jul 16.
2. Runt-related transcription factor 2 (RUNX2) in human colon carcinoma: A potent prognostic factor associated with estrogen receptor. Sase T, Suzuki T, Miura K, Shiiba K, Sato I, Nakamura Y, Takagi K, Onodera Y, Miki Y, Watanabe M, Ishida K, Ohnuma S, Sasaki H, Sato R, Karasawa H, Shibata C, Unno M, Sasaki I, Sasano H. *Int J Cancer*. 2012 Mar 7. doi: 10.1002/ijc.27525. [Epub ahead of print]