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RUNX2 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant RUNX2.
Catalog # AT3743a

Specification

RUNX2 Antibody (monoclonal) (M04) - Product Information

Application	**IF, WB, IHC, E**
Primary Accession	Q13950
Other Accession	NM_004348
Reactivity	**Human, Rat**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**56648**

RUNX2 Antibody (monoclonal) (M04) - 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) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

RUNX2 Antibody (monoclonal) (M04) - Protocols

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

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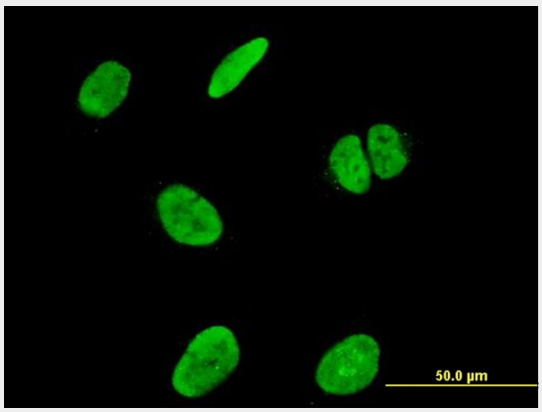
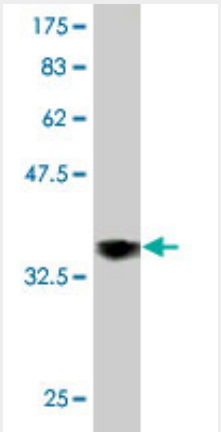
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RUNX2 Antibody (monoclonal) (M04) - 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) .

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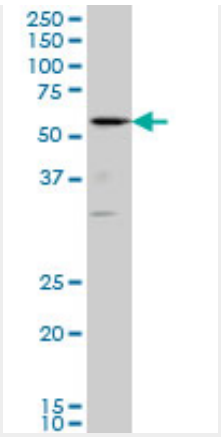
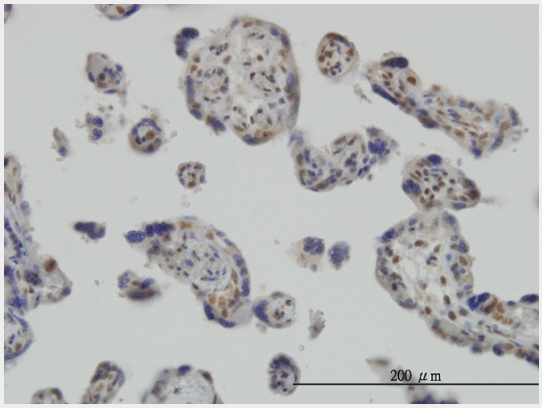
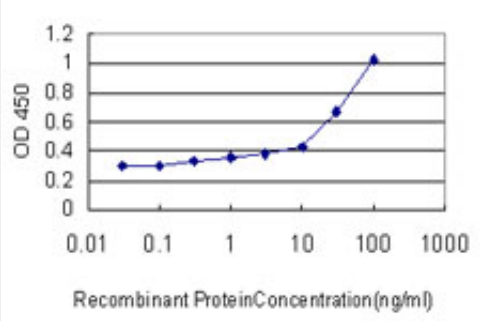


RUNX2 monoclonal antibody (M04), clone 4D5 Western Blot analysis of RUNX2 expression in PC-12 ((Cat # AT3743a)



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 10ng/ml as a capture antibody.

RUNX2 Antibody (monoclonal) (M04) - 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) (M04) - References

RUNX2 Polymorphisms Associated with OPLL and OLF in the Han Population. Liu Y, et al. Clin Orthop Relat Res, 2010 Aug 19. PMID 20721706.Deletions of the RUNX2 gene are present in about 10% of individuals with cleidocranial dysplasia. Ott CE, et al. Hum Mutat, 2010 Aug. PMID 20648631.Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.Frequent attenuation of the WWOX tumor suppressor in osteosarcoma is associated with increased tumorigenicity and aberrant RUNX2 expression. Kurek KC, et al. Cancer Res, 2010 Jul 1. PMID 20530675.Expression analysis of genes associated with human osteosarcoma tumors shows correlation of RUNX2 overexpression with poor response to chemotherapy. Sadikovic B, et al. BMC Cancer, 2010 May 13. PMID 20465837.