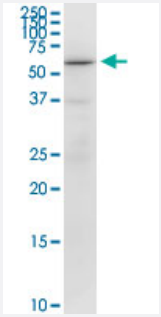
RUNX2 monoclonal antibody (M01), clone 1D8

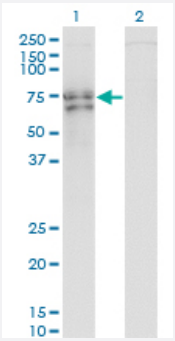
Catalog # H00000860-M01 Size 100 ug

Applications



Western Blot (Cell lysate)

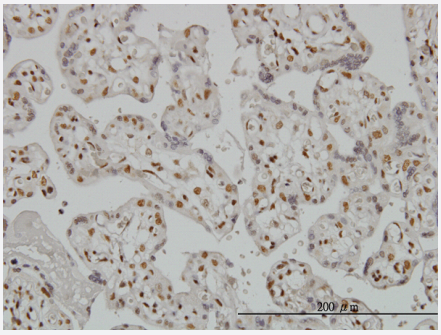
RUNX2 monoclonal antibody (M01), clone 1D8. Western Blot analysis of RUNX2 expression in Jurkat.



Western Blot (Transfected lysate)

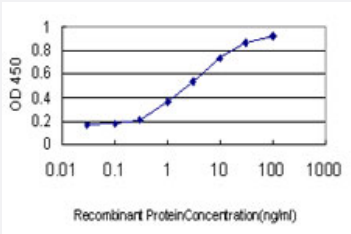
Western Blot analysis of RUNX2 expression in transfected 293T cell line by RUNX2 monoclonal antibody (M01), clone 1D8.

Lane 1: RUNX2 transfected lysate (Predicted MW: 60.28 KDa).
Lane 2: Non-transfected lysate.



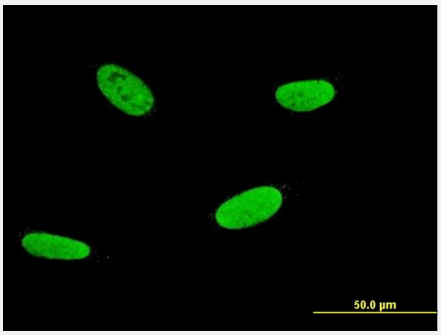
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



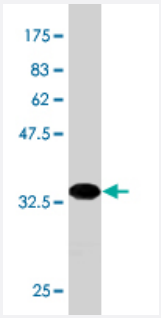
Sandwich ELISA (Recombinant protein)

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



Immunofluorescence

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



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant RUNX2.
Immunogen	RUNX2 (NP_004339, 251 a.a. ~ 350 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	NPRPSLNSAPSPFNPQGQSQITDPRQAQSSPPWSYDQSYPSYLSQMTSPSIHSTTPLSSTRGTGLPAITDVPRRISDDDTATSDFCLWPSTLSKKSQAGA
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (99); Rat (98)
Isotype	IgG2b
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

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  Protocol Download

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- ELISA

- Immunofluorescence

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

Gene Info — RUNX2

Entrez GeneID	860
GeneBank Accession#	NM_004348
Protein Accession#	NP_004339

Gene Name	RUNX2
Gene Alias	AML3, CBFA1, CCD, CCD1, MGC120022, MGC120023, OSF2, PEA2aA, PEBP2A1, PEBP2 A2, PEBP2aA, PEBP2aA1
Gene Description	runt-related transcription factor 2
Omim ID	119600 600211
Gene Ontology	Hyperlink
Gene Summary	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 sk eletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in sk eletal 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 d evelopment disorder cleidocranial dysplasia (CCD). Transcript variants that encode different prot ein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq
Other Designations	CBF-alpha 1|OTTHUMP00000016533|SL3-3 enhancer factor 1 alpha A subunit|SL3/AKV core-bi nding factor alpha A subunit|acute myeloid leukemia 3 protein|core-binding factor, runt domain, al pha subunit 1|osteoblast-specific transcription factor 2|polyomavirus e

Publication Reference

- Surface Epitaxial Crystallization-Directed Nanotopography for Accelerating Preosteoblast Proliferation and Osteogenic Differentiation.

  Yin HM, Liu W, Huang YF, Ren Y, Xu L, Xu JZ, Zhao B, Li ZM.

  ACS Applied Materials & Interfaces 2019 Nov; 11(46):42956.

  Application: WB-Ce, WB-Tr, Mouse, MC3T3-E1 cells, Preosteoblasts

- Vitamin D Promotes MSC Osteogenic Differentiation Stimulating Cell Adhesion and αVβ3 Expression.

  Posa F, Di Benedetto A, Cavalcanti-Adam EA, Colaianni G, Porro C, Trotta T, Brunetti G, Lo Muzio L, Grano M, Mori G.

  Stem Cells International 2018 Feb; 2018:6958713.

  Application: WB, Human, Human dental bud stem cells

- 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.

  Biomedical Materials 2014 Aug; 9(4):45007.

  Application: IHC, Rat, Mesenchymal stromal cells

- Runt-related transcription factor 2 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.

  International Journal of Cancer 2012 Nov; 131(10):2284.

  Application: IHC, WB-Tr, Human, Colon carcinoma, SW480, DLD1 cells

Disease

- Alzheimer disease
- Bone Diseases
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Cleidocranial Dysplasia
- Diabetes Complications
- Diabetes Mellitus
- Fractures
- Genetic Predisposition to Disease
- Metabolic Syndrome X
- Neoplasms
- Ossification of Posterior Longitudinal Ligament
- Osteoporosis
- Tobacco Use Disorder