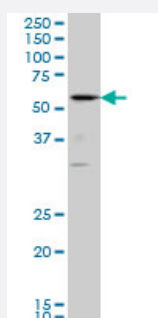


RUNX2 monoclonal antibody (M04), clone 4D5

Catalog # H00000860-M04

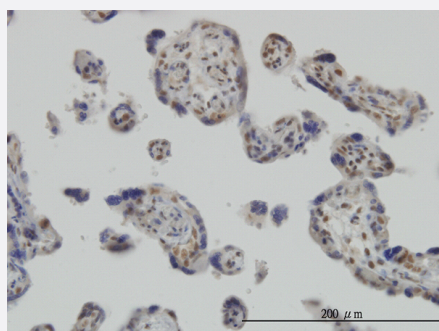
Size 100 ug

Applications



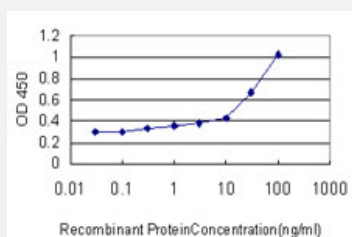
Western Blot (Cell lysate)

RUNX2 monoclonal antibody (M04), clone 4D5 Western Blot analysis of RUNX2 expression in PC-12 (Cat # L012V1).



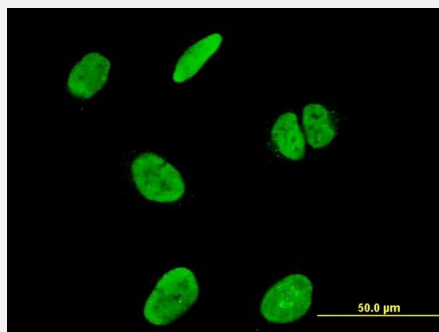
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



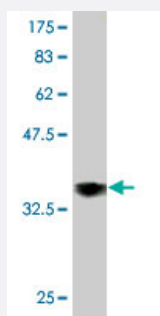
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged RUNX2 is approximately 10ng/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	NPRPSLNSAPSPFNPQGQSQITDPRQAQSSPPWSYDQSYPSYLSQMTSPSIHSTTPLSSTRGTGL PAITDVPRRISDDDTATSDFCLWPSTLSKKSQAGA
Host	Mouse
Reactivity	Human, Rat
Interspecies Antigen Sequence	Mouse (99); Rat (98)
Isotype	IgG2a Kappa
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)

RUNX2 monoclonal antibody (M04), clone 4D5 Western Blot analysis of RUNX2 expression in PC-12 (Cat # L012V1).

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- 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]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged RUNX2 is approximately 10ng/ml as a capture antibody.

[Protocol Download](#)

- 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 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. [provided by RefSeq]

Other Designations

CBF-alpha 1|OTTHUMP00000016533|SL3-3 enhancer factor 1 alpha A subunit|SL3/AKV core-binding factor alpha A subunit|acute myeloid leukemia 3 protein|core-binding factor, runt domain, alpha subunit 1|osteoblast-specific transcription factor 2|polyomavirus e

Publication Reference

- [Inhibition of HIF-1 \$\alpha\$ restrains fracture healing via regulation of autophagy in a rat model.](#)

Qiao J, Huang J, Zhou M, Cao G, Shen H.

Experimental and Therapeutic Medicine 2019 Mar; 17(3):1884.

Application: IHC-P, Rat, Rat bone tissues

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](#)