Datasheet for ABIN3043428

anti-RUNX2 antibody (Middle Region)

2 Images | 9 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	RUNX2
Binding Specificity:	AA 244-278, Middle Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RUNX2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Runt-related transcription factor 2(RUNX2) detection. Tested with WB in Human.
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human RUNX2(244-278aa DRLSDLGRIPHPSMRVGVPPQNPRPSLNSAPSPFN), identical to the related mouse sequence.
Sequence:	DRLSDLGRIP HPSMRVGVPP QNPRPSLNSA PSPFN
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Runt-related transcription factor 2(RUNX2) detection. Tested with WB in Human. Gene Name: runt-related transcription factor 2

Product Details

	Protein Name: Runt-related transcription factor 2
Purification:	Immunogen affinity purified.

Target Details

Target:	RUNX2
Alternative Name:	RUNX2 (RUNX2 Products)
Background:	Core binding factor A1 (CBFA1/RUNX2) is a runt-like transcription factor essential for osteoblast differentiation. This protein is a member of the RUNX family of transcription factors and has a Runt DNA-binding domain. It is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. RUNX2 plays a non-redundant role for Cbfa1 in tooth development that may be distinct from that in bone formation. In odontogenesis, RUNX2 is not involved in the early signaling networks regulating tooth initiation and early morphogenesis but regulates key epithelial-mesenchymal interactions that control advancing morphogenesis and histodifferentiation of the epithelial enamel organ. Synonyms: Acute myeloid leukemia 3 protein antibody|Alpha subunit 1 antibody|AML3 antibody|CBF alpha 1 antibody|CBF-alpha-1 antibody|CBFA1 antibody|CCD antibody|CCD1 antibody|Cleidocranial dysplasia 1 antibody|Core binding factor antibody|Core binding factor runt domain alpha subunit 1 antibody|Core binding factor subunit alpha 1 antibody|Core-binding factor subunit alpha-1 antibody|MGC120022 antibody|MGC120023 antibody|Oncogene AML 3 antibody|Oncogene AML-3 antibody|OSF 2 antibody|OSF-2 antibody|OSF2 antibody|Osteoblast specific transcription factor 2 antibody|Osteoblast-specific transcription factor 2 antibody|OTTHUMP00000016533 antibody|PEA2 alpha A antibody|PEA2-alpha A antibody|PEA2aA antibody|PEBP2 alpha A antibody|PEBP2-alpha A antibody|PEBP2A1 antibody|PEBP2A2 antibody|PEBP2aA antibody|PEBP2aA antibody|PEBP2aA1 antibody|Polyomavirus enhancer binding protein 2 alpha A subunit antibody|Polyomavirus enhancer-binding protein 2 alpha A subunit antibody|Runt domain antibody|Runt related transcription factor 2 antibody|Runt-related transcription factor 2 antibody|RUNX2 antibody|RUNX2_HUMAN antibody|SL3 3 enhancer factor 1 alpha A subunit antibody|SL3-3 enhancer factor 1 alpha A subunit antibody|SL3/AKV core binding factor alpha A subunit antibody|SL3/AKV core-binding factor alpha A subunit antibody
Gene ID:	860
UniProt:	Q13950

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, The detection limit for RUNX2 is approximately 0.25 ng/lane under reducing conditions. Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in:	Yao, Zhao, Ou, Liang, Lin, Wang: "MicroRNA-214 Suppresses Osteogenic Differentiation of Human Periodontal Ligament Stem Cells by Targeting ATF4." in: **Stem cells international**, Vol. 2017, pp. 3028647, (2017) (PubMed). Wang, Wang, Dai, Chen, Yang, Dai, Ou, Wang, Lin: "Effects of Intermittent Administration of Parathyroid Hormone (1-34) on Bone Differentiation in Stromal Precursor Antigen-1 Positive Human Periodontal Ligament Stem Cells." in: **Stem cells international**, Vol. 2016, pp. 4027542, (2016) (PubMed).

Publications

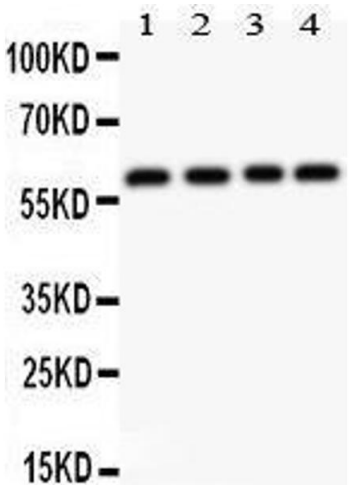
Li, Chen, Peng, Zhou, Fang: "Pulsed electromagnetic fields protect the balance between adipogenesis and osteogenesis on steroid-induced osteonecrosis of femoral head at the pre-collapse stage in rats." in: **Bioelectromagnetics**, Vol. 35, Issue 3, pp. 170-80, (2014) (PubMed).

Song, Yu, Zhao, Wei, Liu, Hu, Zhao, Yang, Wu: "The time-dependent manner of sinusoidal electromagnetic fields on rat bone marrow mesenchymal stem cells proliferation, differentiation, and mineralization." in: **Cell biochemistry and biophysics**, Vol. 69, Issue 1, pp. 47-54, (2014) (PubMed).

Mu, Lv, Wang, Ma, Ma, Liu, Yu, Mu: "Mechanical stress stimulates the osteo/odontoblastic differentiation of human stem cells from apical papilla via erk 1/2 and JNK MAPK pathways." in: **BioMed research international**, Vol. 2014, pp. 494378, (2014) (PubMed).

There are more publications referencing this product on: Product page

Images



Western Blotting

Image 1. Observed bind size: 62KD

Western Blotting

Image 2. Anti-RUNX2 Picoband antibody, All lanes: Anti RUNX2 at 0.5ug/ml WB: Recombinant Human RUNX2 Protein 0.5ng Predicted bind size: 50KD Observed bind size: 50KD