

Anti-DDR2 Antibody

Catalog # ABO11186

Product Information

Application	WB
Primary Accession	Q16832
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Discoidin domain-containing receptor 2(DDR2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4921
Other Names	Discoidin domain-containing receptor 2, Discoidin domain receptor 2, 2.7.10.1, CD167 antigen-like family member B, Discoidin domain-containing receptor tyrosine kinase 2, Neurotrophic tyrosine kinase, receptor-related 3, Receptor protein-tyrosine kinase TKT, Tyrosine-protein kinase TYRO10, CD167b, DDR2, NTRKR3, TKT, TYRO10
Calculated MW	96736
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell membrane ; Single- pass type I membrane protein .
Tissue Specificity	Detected in osteocytes, osteoblastic cells in subchondral bone, bone lining cells, tibia and cartilage (at protein level). Detected at high levels in heart and lung, and at low levels in brain, placenta, liver, skeletal muscle, pancreas, and kidney. .
Source	Eukaryota
Protein Name	Discoidin domain-containing receptor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human DDR2(834-855aa RDTKNRPSFQEIHLLLQGGDE), different from the related mouse sequence by three amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, 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.
Sequence Similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

Protein Information

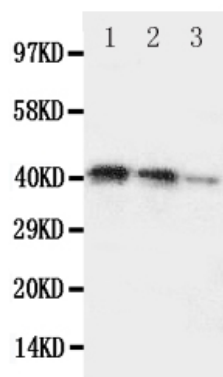
Name	DDR2
Synonyms	NTRKR3, TKT, TYRO10
Function	Tyrosine kinase involved in the regulation of tissues remodeling (PubMed: 30449416). It functions as a cell surface receptor for fibrillar collagen and regulates cell differentiation, remodeling of the extracellular matrix, cell migration and cell proliferation. Required for normal bone development. Regulates osteoblast differentiation and chondrocyte maturation via a signaling pathway that involves MAP kinases and leads to the activation of the transcription factor RUNX2. Regulates remodeling of the extracellular matrix by up- regulation of the collagenases MMP1, MMP2 and MMP13, and thereby facilitates cell migration and tumor cell invasion. Promotes fibroblast migration and proliferation, and thereby contributes to cutaneous wound healing.
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Detected in osteocytes, osteoblastic cells in subchondral bone, bone lining cells, tibia and cartilage (at protein level). Detected at high levels in heart and lung, and at low levels in brain, placenta, liver, skeletal muscle, pancreas, and kidney

Background

DDR2(Discoidin domain receptor family, member 2) also known as NTRKR3 or TKT, is a human gene. Ddr2 protein was detected in most mouse tissues examined. Highest levels of phosphorylated Ddr2 were detected in lung, ovary, and skin, which did not correlate with Ddr2 protein levels. The DDR2 gene is mapped 1q23.3. Receptor tyrosine kinases(RTKs) play a key role in the communication of cells with their microenvironment.Using in situ hybridization with 1-week-old mice, Labrador et al.(2001) found that Ddr2 was expressed along chondrocyte columns in the proliferative region of the growth plate.Ddr2mRNA was also present, although dispersed, at areas of calcified cartilage in the cartilage-bone junction, as well as in the trabecular bone surface. Bargal et al.(2009) also identified a splice site mutation in the DDR2 gene, which resulted in the skipping of exon 17, in one of the Jewish families with SMED-SL originally reported by Borochowitz et al.(1993).

Images

Anti-DDR2 antibody, ABO11186, Western blotting
Recombinant Protein Detection Source:E.coli derived -recombinant human DDR2, 41.2KD(162aa tag+Y656-E855)
Lane 1: Recombinant Human DDR2 Protein 10ng
Lane 2: Recombinant Human DDR2 Protein



5ngLane 3: Recombinant Human DDR2 Protein 2.5ng

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.