

**Anti-DDR2 Antibody**  
**Catalog # ABO11186****Specification**

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**Anti-DDR2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q16832</a>
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.

**Anti-DDR2 Antibody - 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 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**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. .

**Protein Name**

Discoidin domain-containing receptor 2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human DDR2(834-855aa RDTKNRPSFQEIHLILLQGGDE), 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.

**Anti-DDR2 Antibody - Protein Information**

**Name** DDR2

**Synonyms** NTRKR3, TKT, TYRO10

**Function**

Tyrosine kinase involved in the regulation of tissues remodeling (PubMed:<a href="http://www.uniprot.org/citations/30449416" target="\_blank">30449416</a>). 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

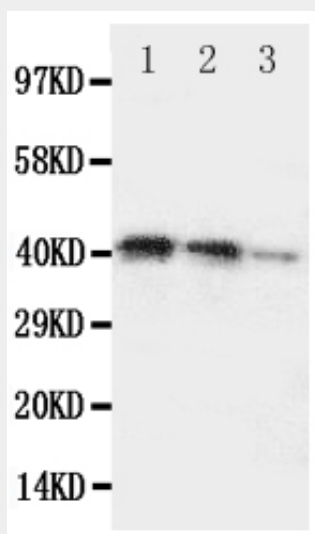
**Anti-DDR2 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

## Anti-DDR2 Antibody - 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 5ng Lane 3: Recombinant Human DDR2 Protein 2.5ng

## Anti-DDR2 Antibody - 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. Ddr2 mRNA 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).