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# DDR2 Antibody(Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2058a

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | Q16832 |
| **Other Accession** | NP_001014796.1 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Bovine, Canine, Rabbit, Chicken |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone Names** | 484CT5.5.4 |
| **Calculated MW** | 96736 |
| **Antigen Region** | 290-320 |

## Additional Information

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| **Gene ID** | 4921 |
| **Other Names** | Discoidin domain-containing receptor 2, Discoidin domain receptor 2, 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 |
| **Target/Specificity** | This DDR2 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 290-320 amino acids from human DDR2. |
| **Dilution** | WB~~1:100~1600 IHC-P~~1:200 E~~Use at an assay dependent concentration. |
| **Format** | Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | DDR2 Antibody(Ascites) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | DDR2 |
| **Synonyms** | NTRKR3, TKT, TYRO10 |

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| **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 |

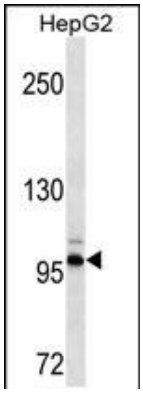
## Background

Receptor tyrosine kinases (RTKs) play a key role in the communication of cells with their microenvironment. These molecules are involved in the regulation of cell growth, differentiation, and metabolism. In several cases the biochemical mechanism by which RTKs transduce signals across the membrane has been shown to be ligand induced receptor oligomerization and subsequent intracellular phosphorylation. This autophosphorylation leads to phosphorylation of cytosolic targets as well as association with other molecules, which are involved in pleiotropic effects of signal transduction. RTKs have a tripartite structure with extracellular, transmembrane, and cytoplasmic regions. This gene encodes a member of a novel subclass of RTKs and contains a distinct extracellular region encompassing a factor VIII-like domain. Alternative splicing in the 5' UTR results in multiple transcript variants encoding the same protein. [provided by RefSeq].

## References


Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Ali, B.R., et al. Hum. Mol. Genet. 19(11):2239-2250(2010)
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :
Ehret, G.B., et al. Eur. J. Hum. Genet. 17(12):1650-1657(2009)
Su, J., et al. Mol. Cell. Biochem. 330 (1-2), 141-152 (2009) :


## Images




DDR2 Antibody (Cat. #AM2058a) western blot analysis in HepG2 cell line lysates (35µg/lane).This demonstrates the DDR2 antibody detected the DDR2 protein (arrow).

Immunohistochemical analysis of paraffin-embedded



Human lung section using Pink1(Cat#am2058a). am2058a was diluted at 1:200 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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