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DDR2 Antibody
Mouse Monoclonal Antibody
Catalog # ALS12832

Specification

DDR2 Antibody - Product Information

Application	**IF, IHC**
Primary Accession	Q16832
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**97kDa KDa**

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

Target/Specificity
Ni-NTA purified truncated recombinant DDR2-Trx expressed in E. Coli strain BL21 (DE3)

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
DDR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DDR2 Antibody - 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

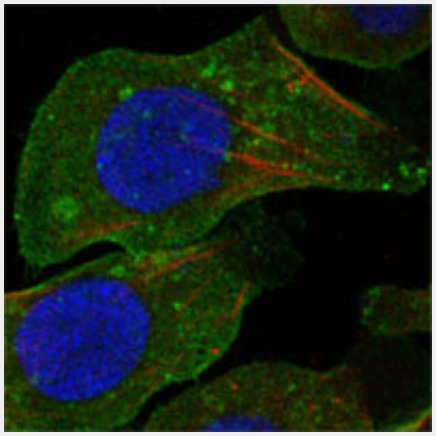
Volume
50 µl

DDR2 Antibody - Protocols

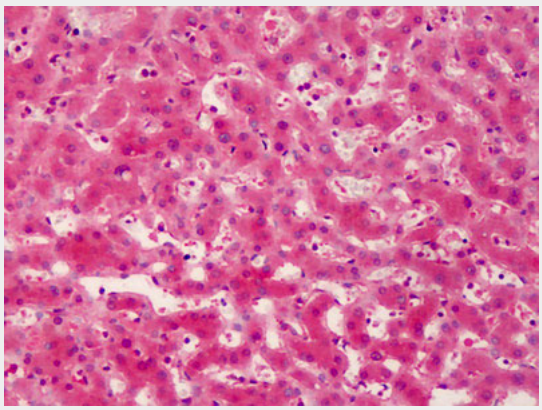
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DDR2 Antibody - Images



Confocal immunofluorescence of A549 cells using DDR2 mouse monoclonal antibody (green).



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Anti-DDR2 antibody IHC of human liver.

DDR2 Antibody - Background

Tyrosine kinase that functions as 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.

DDR2 Antibody - References

Karn T.,et al.Oncogene 8:3433-3440(1993).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Vogel W.,et al.Mol. Cell 1:13-23(1997).