

## **DDR2 Monoclonal Antibody**

Catalog No: YM0195

**Reactivity:** Human

**Applications:** WB;IHC;IF;ELISA

Target: DDR2

Gene Name: DDR2

**Protein Name:** Discoidin domain-containing receptor 2

Q16832

Q62371

Human Gene Id: 4921

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of human DDR2 expressed in E. Coli.

**Specificity:** DDR2 Monoclonal Antibody detects endogenous levels of DDR2 protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 97kD

P References: 1. Leitinger B. Kwan AP. Matrix Biol. 2006, Aug, 25(6):355-64. Epub 2006 May

26.

2. Shyu KG. Chao YM. Wang BW. et al. Hypertension. 2005, Sep, 46(3):614-21.



Epub 2005 Aug 8. 3. Neale JC. Kenny

### **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 transcr

#### **Function:**

catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:This tyrosine kinase receptor for fibrillar collagen mediates fibroblast migration and proliferation. Contributes to cutaneous wound healing.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.,similarity:Contains 1 F5/8 type C domain.,similarity:Contains 1 protein kinase domain.,tissue specificity:The major 10 kDa transcript is expressed in high levels in heart and lung, less in brain, placenta, liver, skeletal muscle, pancreas, and kidney.,

# Subcellular Location:

Cell membrane ; Single-pass type I membrane protein .

**Expression:** 

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.

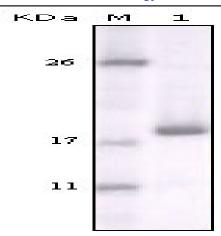
**Sort**: 5057

**No4**: 1

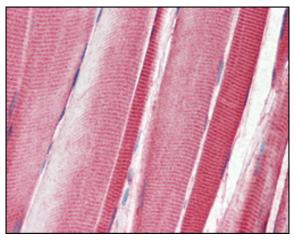
Host: Mouse

Modifications: Unmodified

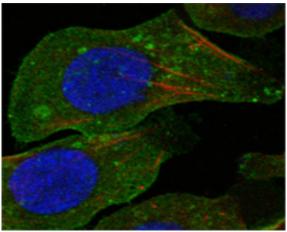
# **Products Images**



Western Blot analysis using DDR2 Monoclonal Antibody against truncated DDR2 recombinant protein.



Immunohistochemistry analysis of paraffin-embedded human skeletal musle tissues with AEC staining using DDR2 Monoclonal Antibody.



Confocal immunofluorescence analysis of A549 cells using DDR2 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.