

## **DDR1 Monoclonal Antibody**

Catalog No: YM0194

Reactivity: Human

**Applications:** WB;ELISA

Target: DDR1

Gene Name: DDR1

**Protein Name:** Epithelial discoidin domain-containing receptor 1

Q03146

Human Gene Id: 780

Human Swiss Prot Q08345

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of DDR1 (aa602-681) expressed in E. Coli.

**Specificity:** DDR1 Monoclonal Antibody detects endogenous levels of DDR1 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. 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: 101kD

**P References :** 1. FASEB J. 2000 May;14(7):973-81.

2. Exp Eye Res. 2001 Jan;72(1):87-92.

3. Proc Natl Acad Sci U S A. 2002 Dec 24;99(26):16899-903.



#### **Background:**

Receptor tyrosine kinases play a key role in the communication of cells with their microenvironment. These kinases are involved in the regulation of cell growth, differentiation and metabolism. The protein encoded by this gene belongs to a subfamily of tyrosine kinase receptors with homology to Dictyostelium discoideum protein discoidin I in their extracellular domain, and that are activated by various types of collagen. Expression of this protein is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain. In addition, it has been shown to be significantly overexpressed in several human tumors. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Feb 2011],

### **Function:**

catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,domain:The Gly/Pro-rich domains may be required for an unusual geometry of interaction with ligand or substrates.,function:May be involved in cell-cell interactions and recognition.,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:Expressed at low levels in most adult tissues and is highest in the brain and lung. Abundant in breast carcinoma cell lines.,

# Subcellular Location:

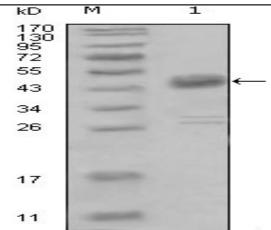
[Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Cell membrane; Single-pass type I membrane protein.; [Isoform 3]: Secreted .; [Isoform 4]: Cell membrane; Single-pass type I membrane protein.

## **Expression:**

Detected in T-47D, MDA-MB-175 and HBL-100 breast carcinoma cells, A-431 epidermoid carcinoma cells, SW48 and SNU-C2B colon carcinoma cells and Hs 294T melanoma cells (at protein level). Expressed at low levels in most adult tissues and is highest in the brain, lung, placenta and kidney. Lower levels of expression are detected in melanocytes, heart, liver, skeletal muscle and pancreas. Abundant in breast carcinoma cell lines. In the colonic mucosa, expressed in epithelia but not in the connective tissue of the lamina propria. In the thyroid gland, expressed in the epithelium of the thyroid follicles. In pancreas, expressed in the islets of Langerhans cells, but not in the surrounding epithelial cells of the exocrine pancreas. In kidney, expressed in the epithelia of the distal tubules. Not

# **Products Images**

2/3



Western Blot analysis using DDR1 Monoclonal Antibody against truncated MBP-DDR1 recombinant protein (1).