

## DDR1 Ab

Cat.#: BF0293  
Size: 50ul,100ul,200ul

Concn.: 1mg/ml  
Source: Mouse

Mol.Wt.: 101kDa.  
Clonality: Monoclonal

Application: ELISA 1/10000, WB 1/500 - 1/2000

Reactivity: Human

Purification: Affinity-chromatography.

Specificity: DDR1 Ab detects endogenous levels of total DDR1.

Immunogen: Purified recombinant fragment of human DDR1 expressed in E. Coli.

Uniprot: Q08345

Description: 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. The protein encoded by this gene is a RTK that is widely expressed in normal and transformed epithelial cells and is activated by various types of collagen. This protein belongs to a subfamily of tyrosine kinase receptors with a homology region to the Dictyostelium discoideum protein discoidin I in their extracellular domain. Its autophosphorylation is achieved by all collagens so far tested (type I to type VI). In situ studies and Northern-blot analysis showed that expression of this encoded protein is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain. In addition, this protein is significantly over-expressed in several human tumors from breast, ovarian, esophageal, and pediatric brain. This gene is located on chromosome 6p21.3 in proximity to several HLA class I genes. Three isoforms of this gene are generated by alternative splicing. [PROW]

Subcellular Location: Secreted and Membrane.

Tissue Specificity: 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 expressed in connective tissue, endothelial cells, adipose tissue, muscle cells or cells of hematopoietic origin.

**Similarity:**

The Gly/Pro-rich domains may be required for an unusual geometry of interaction with ligand or substrates. Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

**Storage Condition and Buffer:**

Mouse IgG1 in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.

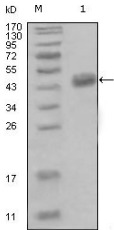


Figure 1: Western blot analysis using DDR1 mouse mAb against truncated MBP-DDR1 recombinant protein (1).

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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