



DDR1 (phospho Tyr513) Polyclonal Antibody

Catalog No	YP-Ab-13046
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	DDR1
Protein Name	Epithelial discoidin domain-containing receptor 1
Immunogen	The antiserum was produced against synthesized peptide derived from human DDR1 around the phosphorylation site of Tyr513. AA range:479-528
Specificity	Phospho-DDR1 (Y513) Polyclonal Antibody detects endogenous levels of DDR1 protein only when phosphorylated at Y513.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DDR1; CAK; EDDR1; NEP; NTRK4; PTK3A; RTK6; TRKE; Epithelial discoidin domain-containing receptor 1; Epithelial discoidin domain receptor 1; CD167 antigen-like family member A; Cell adhesion kinase; Discoidin receptor tyrosine kinase; HGK2;
Observed Band	110kD
Cell Pathway	[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.
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

**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.,

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],

matters needing attention

Avoid repeated freezing and thawing!

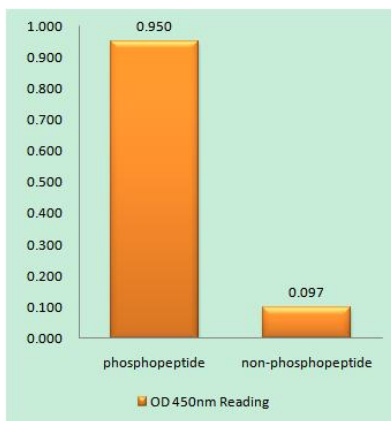
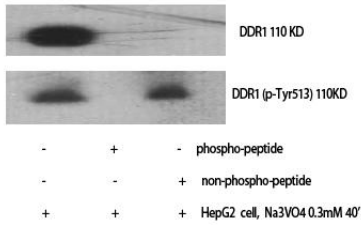
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

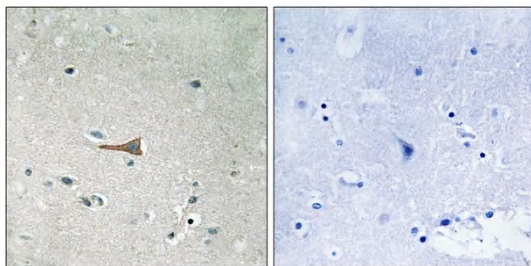


Products Images

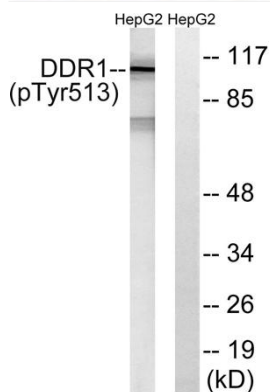
Western Blot analysis of various cells using Phospho-DDR1 (Y513) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using DDR1 (Phospho-Tyr513) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using DDR1 (Phospho-Tyr513) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with Na3VO4 0.3mM 40', using DDR1 (Phospho-Tyr513) Antibody. The lane on the right is blocked with the phospho peptide.