

**DDR1 (phospho Tyr513) Polyclonal Antibody**

<b>Catalog No :</b>	YP0806
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	DDR1
<b>Gene Name :</b>	DDR1
<b>Protein Name :</b>	Epithelial discoidin domain-containing receptor 1
<b>Human Gene Id :</b>	780
<b>Human Swiss Prot No :</b>	Q08345
<b>Mouse Gene Id :</b>	12305
<b>Mouse Swiss Prot No :</b>	Q03146
<b>Rat Swiss Prot No :</b>	Q63474
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human DDR1 around the phosphorylation site of Tyr513. AA range:479-528
<b>Specificity :</b>	Phospho-DDR1 (Y513) Polyclonal Antibody detects endogenous levels of DDR1 protein only when phosphorylated at Y513.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

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

**Observed Band :** 110kD

**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],

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**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.,

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**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.

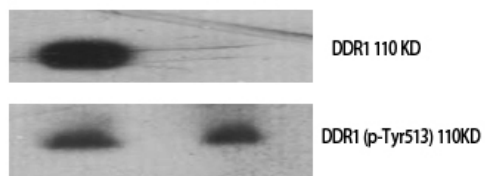
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**Expression :** Detected in T-47D, MDA-MB-175 and HBL-100 breast carcinoma cells, A-431 epidermoid carcinoma cells, SW48 and SNU-C2B colon carcinoma cells and Hs 294T melanoma cells (at protein level). Expressed at low levels in most adult tissues 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

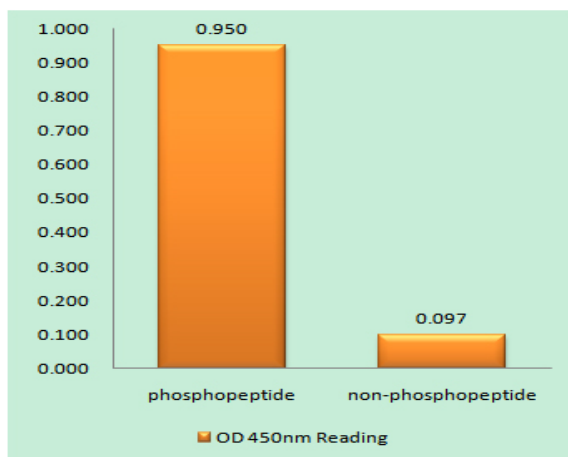
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## Products Images

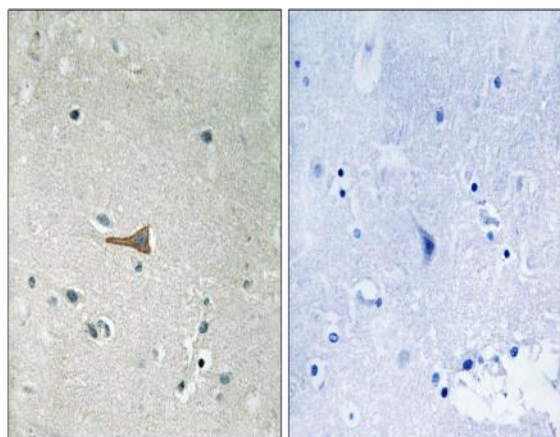
Western Blot analysis of various cells using Phospho-DDR1 (Y513) Polyclonal Antibody



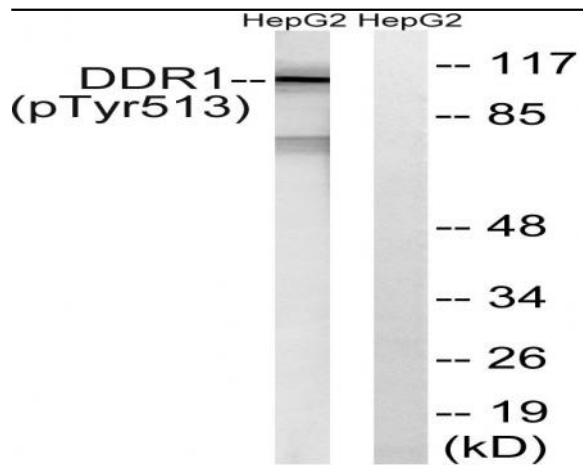
-	+	-	phospho-peptide
-	-	+	non-phospho-peptide
+	+	+	HepG2 cell, Na3VO4 0.3mM 40'



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 Na<sub>3</sub>VO<sub>4</sub> 0.3mM 40', using DDR1 (Phospho-Tyr513) Antibody. The lane on the right is blocked with the phospho peptide.