

**Anti-Human/Mouse/Rat Phospho-DDR1 (Tyr513) Polyclonal Antibody****Polyclonal Antibody****Cat.NO.: PA05132**

3th Edition

**Description:** 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. DDR1 (Discoidin Domain Receptor Tyrosine Kinase 1) is a Protein Coding gene. Diseases associated with DDR1 include Pulmonary Fibrosis, Idiopathic and Breast Cancer. Among its related pathways are GPCR Pathway and Nanog in Mammalian ESC Pluripotency. GO annotations related to this gene include transferase activity, transferring phosphorus-containing groups and protein tyrosine kinase activity. An important paralog of this gene is DDR2.

**Antigen:** Synthesized phospho derived from human DDR1 (Phospho-Tyr513)

**Form:**

**How to use:** 1.0 ml distilled water will be added to the product

**Stability:** Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

**Dilution:** PBS (pH7.4) containing 1% BSA

**Application:** This antibody can be used for western blotting in concentration of 1?5?g/ml.

**Specificity:** Detected in T-47D, MDA-MB-175 and HBL-100 breast carcinoma cells, A431 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.