Anti-NDRG1 antibody

Description	Unconjugated Rabbit polyclonal to NDRG1

Model	STJ190163
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human NDRG1 protein.
Immunogen Region	270-350aa
Gene ID	10397
Gene Symbol	NDRG1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	NDRG1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Ubiquitous; expressed most prominently in placental membranes and prostate, kidney, small intestine, and ovary tissues. Also expressed in heart, brain, skeletal muscle, lung, liver and pancreas. Low levels in peripheral blood leukocytes and in tissues of the immune system. Expressed mainly in epithelial cells. Also found in Schwann cells of peripheral neurons. Reduced expression in adenocarcinomas compared to normal tissues. In colon, prostate and placental membranes, the cells that border the lumen show t
Purification	NDRG1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).

Protein Name	Protein NDRG1 Differentiation-related gene 1 protein DRG-1 N-myc downstream-regulated gene 1 protein Nickel-specific induction protein Cap43 Reducing agents and tunicamycin-responsive protein RTP Rit42
Molecular Weight	43 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7679OMIM:601455
Alternative Names	Protein NDRG1 Differentiation-related gene 1 protein DRG-1 N-myc downstream-regulated gene 1 protein Nickel-specific induction protein Cap43 Reducing agents and tunicamycin-responsive protein RTP Rit42
Function	Stress-responsive protein involved in hormone responses, cell growth, and differentiation. Acts as a tumor suppressor in many cell types. Necessary but not sufficient for p53/TP53-mediated caspase activation and apoptosis. Has a role in cell trafficking, notably of the Schwann cell, and is necessary for the maintenance and development of the peripheral nerve myelin sheath. Required for vesicular recycling of CDH1 and TF. May also function in lipid trafficking. Protects cells from spindle disruption damage. Functions in p53/TP53-dependent mitotic spindle checkpoint. Regulates microtubule dynamics and maintains euploidy.
Cellular Localization	Cytoplasm, cytosol. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cell membrane. Mainly cytoplasmic but differentially localized to other regions. Associates with the plasma membrane in intestinal epithelia and lactating mammary gland. Translocated to the nucleus in a p53/TP53-dependent manner. In prostate epithelium and placental chorion, located in both the cytoplasm and in the nucleus. No nuclear localization in colon epithelium cells. In intestinal mucosa, prostate and renal cortex, located predominantly adjacent to adherens junctions. Cytoplasmic with granular staining in proximal tubular cells of the kidney and salivary gland ducts. Recruits to the membrane of recycling/sorting and late endosomes via binding to phosphatidylinositol 4-phosphate. Associates with microtubules. Colocalizes with TUBG1 in the centrosome. Cytoplasmic location increased with hypoxia. Phosphorylated form found associated with centromeres during S-phase of mitosis and with the plasma membrane.
Post-translational Modifications	Under stress conditions, phosphorylated in the C-terminal on many serine and threonine residues. Phosphorylated in vitro by PKA. Phosphorylation enhanced by increased intracellular cAMP levels. Homocysteine induces dephosphorylation. Phosphorylation by SGK1 is cell cycle dependent.