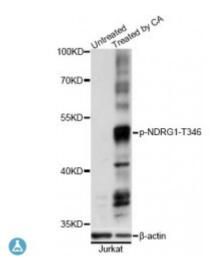
Anti-Phospho-NDRG1-(T346) Antibody



Description

This gene is a member of the N-myc downregulated gene family which belongs to the alpha/beta hydrolase superfamily. The protein encoded by this gene is a cytoplasmic protein involved in stress responses, hormone responses, cell growth, and differentiation. The encoded protein is necessary for p53-mediated caspase activation and apoptosis. Mutations in this gene are a cause of Charcot-Marie-Tooth disease type 4D, and expression of this gene may be a prognostic indicator for several types of cancer. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

Model STJ117890

Host Rabbit

Reactivity Human, Mouse

Applications WB

Immunogen A synthetic phosphorylated peptide around T346 of human NDRG1

(NP_001128714.1).

Gene ID <u>10397</u>

Gene Symbol NDRG1

Dilution range WB 1:500 - 1:2000

Tissue Specificity Ubiquitous

Purification Affinity purification

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 42.835 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links <u>HGNC:7679OMIM:601455Reactome:R-HSA-6803205</u>

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,

Post-translational 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,

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Modifications

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