

KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1873

Specification

KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession Q92597

Reactivity
Clonality
Human, Mouse
Monoclonal
Isotype
Rabbit IgG

Calculated MW Predicted, 43 kDa, observed, 43 kDa KDa

Gene Name NDRG1

Aliases NDRG1; N-Myc Downstream Regulated 1; DRG1; RTP; CAP43; TDD5; NDR1; Reducing

Agents And Tunicamycin-Responsive
Protein; N-Myc Downstream-Regulated
Gene 1 Protein; Nickel-Specific Induction
Protein Cap43; Differentiation-Related
Gene 1 Protein; Protein NDRG1; DRG-1;
Protein Regulated By Oxygen-1; PROXY1;
CMT4D; HMSNL; RIT42; TARG1; Rit42;

NMSL; GC4

Immunogen A synthesized peptide derived from human

Phospho-NDRG1 (Ser330)

KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody - Additional Information

Gene ID **10397**

Other 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, NDRG1, CAP43, DRG1, RTP

KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody - Protein Information

Name NDRG1

Synonyms CAP43, DRG1, RTP

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 Location

Cytoplasm, cytosol. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cell membrane Note=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

Tissue Location

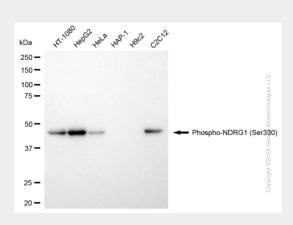
Ubiquitous; expressed most prominently in placental membranes and prostate, kidney, small intestine, and ovary tissues Also expressed in heart, brain, skeletal muscle, lung, liver and pancreas. Low levels in peripheral blood leukocytes and in tissues of the immune system. Expressed mainly in epithelial 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 the highest expression.

KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

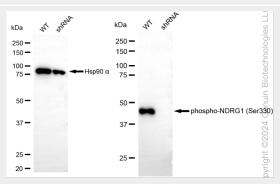
KD-Validated Anti-Phospho-NDRG1 (Ser330) Rabbit Monoclonal Antibody - Images



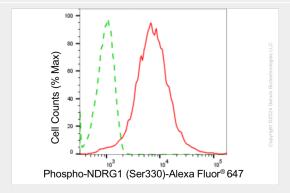
Western blotting analysis using anti-phospho-NDRG1 (Ser330) antibody (Cat#AGI1873). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was



incubated with anti-phospho-NDRG1 (Ser330) antibody (Cat#AGI1873, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-phospho-NDRG1 (Ser330) antibody (Cat#AGI1873). Phospho-NDRG1 (Ser330) expression in wild-type (WT) and NDRG1 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-phospho-NDRG1 (Ser330) antibody (Cat#AGI1873, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of phospho-NDRG1 (Ser330) expression in HepG2 cells using anti-phospho-NDRG1 (Ser330) antibody (Cat#AGI1873, 1:2,000). Green, isotype control; red, phospho-NDRG1 (Ser330).