

Rabbit NDRG1 Polyclonal Antibody | anti-NDRG1 antibody

Phospho-NDRG1 (Ser330) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329943	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

NDRG1; Polyclonal Antibody; Phospho-NDRG1 (Ser330) Antibody; 42kDa; Anti GC4; cap43; cmt4d; Differentiation related gene1 protein; Differentiation-related gene 1 protein; Drg 1; DRG-1; drg1; gc4; GC4 antibody; hmsnl; Human mRNA for RTP complete cds; N myc downstream regulated gene 1; N myc downstream regulated gene 1 protein; N-myc downstream-regulated gene 1 protein; Ndr 1; ndr1; NDRG 1; NdrG1; NDRG1 protein; NDRG1_HUMAN; Nickel specific induction protein; Nickel specific induction protein Cap43; Nickel-specific induction protein Cap43; nmsl; Nmyc downstream regulated; Nmyc downstream regulated gene1; Nmyc downstream regulated gene1 protein; Protein NDRG1; Protein regulated by oxygen 1; Protein regulated by oxygen1; Proxy1; Reduced in tumor; Reducin; Reducing agents and tunicamycin responsive protein; Reducing agents and tunicamycin-responsive protein; Rit42; RTP; targ1; TDD5; tdds; Tunicamycin responsive protein; anti-NDRG1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-NDRG1 (Ser330) Antibody detects endogenous levels of NDRG1 only when phosphorylated at Ser330. 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 the highest expression.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-NDRG1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NDRG1 around the phosphorylation site of Ser330.
Conjugation	Unconjugated
Fragment	Fab fragment
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.
Subunit Structure	Interacts with RAB4A (membrane-bound form); the interaction involves NDRG1 in vesicular recycling of CDH1.
Similarity	Belongs to the NDRG family.

Subcellular 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.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
 At 1/100 staining Human ovarian cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemisry)
 At 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
 Staining Rat kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
 Western blot analysis NDRG1 (Phospho-Ser330) using EGF treated HepG2 whole cell lysates.-/+ means absence or presence of N peptide;P non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-NDRG1 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	207028748
NCBI GeneID	10397
NCBI Accession #	NP_001128714.1
NCBI GenBank Nucleotide #	NM_001135242.1
UniProt Accession #	Q92597; O15207; Q6IBG2; Q9NYR6; Q9UK29; B3KR80; B7Z446
Molecular Weight	394
NCBI Official Full Name	protein NDRG1 isoform 1
NCBI Official Synonym Full Names	N-myc downstream regulated 1

NCBI Official Symbol	NDRG1
NCBI Official Synonym Symbols	GC4; RTP; DRG1; NDR1; NMSL; TDD5; CAP43; CMT4D; DRG-1; HMSNL; RIT42; TARG1; PROXY1
NCBI Protein Information	protein NDRG1; protein regulated by oxygen-1; differentiation-related gene 1 protein; nickel-specific induction protein Cap43; N-myc downstream-regulated gene 1 protein; reducing agents and tunicamycin-responsive protein
UniProt Protein Name	Protein NDRG1
UniProt Gene Name	NDRG1
UniProt Synonym Gene Names	CAP43; DRG1; RTP; DRG-1; RTP
UniProt Entry Name	NDRG1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ndrg1-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329943>