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NDRG1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6935a

Specification

NDRG1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q92597

NDRG1 Antibody (N-term) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6935a was selected from the N-term region of human NDRG1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NDRG1 Antibody (N-term) Blocking Peptide - 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.

NDRG1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

NDRG1 Antibody (N-term) Blocking Peptide - Images

NDRG1 Antibody (N-term) Blocking Peptide - Background

NDRG1 is a cytoplasmic protein involved in stress responses, hormone responses, cell growth, and differentiation. It is necessary for p53-mediated caspase activation and apoptosis.

NDRG1 Antibody (N-term) Blocking Peptide - References

Sugiyama,N., et.al., Mol. Cell Proteomics 6 (6), 1103-1109 (2007)