

### **NDRG1** Antibody

Rabbit mAb Catalog # AP91508

## **Specification**

## **NDRG1 Antibody - Product Information**

Application WB, IHC, ICC, IP

Primary Accession
Reactivity
Rat

Clonality Monoclonal

**Other Names** 

Protein NDRG1; Differentiation-related gene 1 protein; DRG-1; RTP; Rit42; NDRG1; CAP43; DRG1;

RTP; targ1; TDD5; tdds;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 42835 Da

# **NDRG1** Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

NDRG1

Description

May have a growth inhibitory role.

Storage Condition and Buffer

Rabbit IgG in phosphate buffered s

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **NDRG1** 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**

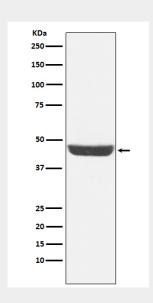
Ubiquitous; expressed most prominently in placental membranes and prostate, kidney, small intestine, and ovary tissues Also expressed in heart, brain, skeletal muscle, lung, liver and pancreas. Low levels in peripheral blood leukocytes and in tissues of the immune system. Expressed mainly in epithelial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

## **NDRG1 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

# **NDRG1** Antibody - Images



Western blot analysis of NDRG1 expression in HeLa cell lysate.