

# Goat anti-NDRG1, Biotinylated Antibody

Peptide-affinity purified goat antibody Catalog # AF4363a

## **Product Information**

**Application** WB, IHC, Pep-ELISA

Primary Accession

Other Accession

Reactivity

Host

Clonality

Clone Names

Calculated MW

Other Accession

NP\_006087.2

Human

Goat

Polyclonal

NDRG1

42835

## **Additional Information**

**Gene ID** 10397

Other Names NDRG1; N-myc downstream regulated 1; CAP43; CMT4D; DRG-1; DRG1; GC4;

HMSNL; NDR1; NMSL; PROXY1; RIT42; RTP; TARG1; TDD5; N-myc

downstream-regulated gene 1 protein; differentiation-related gene 1 protein;

nickel-specific induction protein Cap43; protein re

**Dilution** WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A

**Format** Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5%

bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and

thawing.

Immunogen Reported variants represent identical protein: NP\_006087.2, NP\_001128714.1

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

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat anti-NDRG1, Biotinylated Antibody is for research use only and not for

use in diagnostic or therapeutic procedures.

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.