ARG57159
anti-NDRG1 antibody [11G4]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [11G4] recognizes NDRG1
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	11G4
Isotype	IgG1, kappa
Target Name	NDRG1
Species	Human
Immunogen	Recombinant fragment around aa. 1-394 of Human NDRG1
Conjugation	Un-conjugated
Alternate Names	DRG1; Protein NDRG1; Differentiation-related gene 1 protein; PROXY1; TARG1; RIT42; Reducing agents and tunicamycin-responsive protein; Rit42; CMT4D; RTP; CAP43; N-myc downstream-regulated gene 1 protein; TDD5; HMSNL; NMSL; Nickel-specific induction protein Cap43; NDR1; DRG-1; GC4

Application Instructions

Application table

Application	Dilution
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

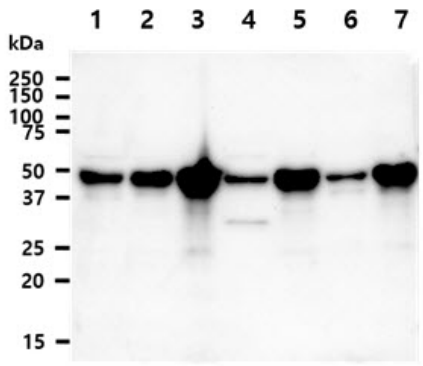
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 10397 Human Swiss-port # Q92597 Human
Gene Symbol	NDRG1
Gene Full Name	N-myc downstream regulated 1
Background	This gene is a member of the N-myc downregulated gene family which belongs to the alpha/beta hydrolase superfamily. The protein encoded by this gene is a cytoplasmic protein involved in stress responses, hormone responses, cell growth, and differentiation. The encoded protein is necessary for p53-mediated caspase activation and apoptosis. Mutations in this gene are a cause of Charcot-Marie-Tooth disease type 4D, and expression of this gene may be a prognostic indicator for several types of cancer. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]
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. [UniProt]
Calculated Mw	43 kDa
PTM	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.

Images



ARG57159 anti-NDRG1 antibody [11G4] WB image

Western blot: 40 µg of 1) LnCaP, 2) HeLa, 3) PC3, 4) Hep3B, 5) HT1080, 6) Jurkat, and 7) SW480 cell lysates stained with ARG57159 anti-NDRG1 antibody [11G4] at 1:1000.