

Product datasheet for **TA327295S**

NDRG1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human NDRG1
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	N-myc downstream regulated 1
Database Link:	NP_006087 Entrez Gene 17988 Mouse Entrez Gene 299923 Rat Entrez Gene 10397 Human Q92597



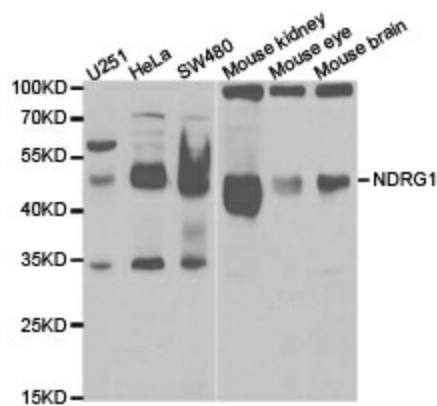
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Background:

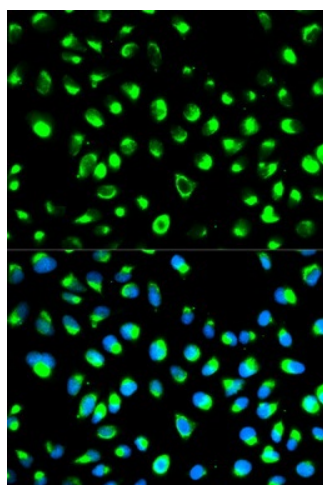
N-myc downstream-regulated gene 1 (NDRG1), also termed Cap43, Drg1, RTP/rit42, and Proxy-1, is a member of the NDRG family, which is composed of four members (NDRG1-4) that function in growth, differentiation, and cell survival. NDRG1 is ubiquitously expressed and highly responsive to a variety of stress signals including DNA damage, hypoxia, and elevated levels of nickel and calcium. Expression of NDRG1 is elevated in N-myc defective mice and is negatively regulated by N- and c-myc. During DNA damage, NDRG1 is induced in a p53-dependent fashion and is necessary for p53-mediated apoptosis. Research studies have shown that NDRG1 may also play a role in cancer progression by promoting differentiation, inhibiting growth, and modulating metastasis and angiogenesis. Nonsense mutation of the NDRG1 gene has been shown to cause hereditary motor and sensory neuropathy-Lom (HMSNL), which is supported by studies demonstrating the role of NDRG1 in maintaining myelin sheaths and axonal survival. NDRG1 is up-regulated during mast cell maturation and its deletion leads to attenuated allergic responses. Both NDRG1 and NDRG2 are substrates of SGK1, although the precise physiological role of SGK1-mediated phosphorylation is not known. NDRG1 is phosphorylated by SGK1 at Thr328, Ser330, Thr346, Thr356, and Thr366. Phosphorylation by SGK1 primes NDRG1 for phosphorylation by GSK-3.

Synonyms:

CAP43; CMT4D; DRG-1; DRG1; GC4; HMSNL; NDR1; NMSL; PROXY1; RIT42; RTP; TARG1; TDD5

Product images:

Western blot analysis of extracts of various cell lines, using NDRG1 antibody.



Immunofluorescence analysis of MCF7 cell using NDRG1 antibody. Blue: DAPI for nuclear staining.