

Recombinant Human N-myc Downstream Regulated 1, His-tagged

Cat. No. NDRG1-1398H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human NDRG1, fused to His-tag at C-terminus, was expressed in E.coli and purified by using conventional chromatography. MW =43.9 kDa (402aa).
Species	Human
Source	E.coli
Description	N-myc downstream regulated gene (NDRG)-1 is one of 4 members of the NDRG α/β -hydrolase family. This protein is classified in databases as a tumor suppressor and heavy metal-response protein. Its functions include cell-cycle regulation, cellular differentiation, apoptosis, hypoxia response and metal-ion sensing. Mutation in the NDRG1 gene has been reported to be causative for hereditary motor and sensory neuropathy-Lom (HMSNL), a severe autosomal recessive form of Charcot-Marie-Tooth (CMT) disease.
Amino Acid Sequence	MPALPEDGGS GAFPPGHFKD PKRLYCKNGG FFLRIHPDGR VDGVREKSDP HIKLQLQAEE RGVVSIKVC ANRYLAMKED GRLLASKCVT DECFFFERLE SNNYNTYRSR KYTSWYVALK RTGQYKLGSK TGPGQKAILF LPMSAKS
Form	Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1 mM PMSF, 10% Glycerol.
Molecular Weight	43.9 kDa (402aa), confirmed by MALDI-TOF
Purity	> 95% by SDS – PAGE.

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Concentration	1 mg/ml (determined by Bradford assay).
Biological Activity	The ED50 for this effect is 0.5 - 1.5 ng/ml. Measured in a cell proliferation assay using MCF7 cell.
Activity Assay	1. Cell line: MCF7 (Human breast adenocarcinoma cell)2. Maintenance Condition: RPMI 1640 containing 10% FBS 3. Assay medium: serum free RPMI 1640 4. Cell density: 2 x 10 ⁴ cells/well (96 well plate, final volume 100ul) 5. Incubation time : 40 hrs (after sample treatment)6. Concentration range: 0.19ng/ml - 50ng/ml 7. Detection method : BrdU assay
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	NDRG1 N-myc downstream regulated 1 [Homo sapiens]
Synonyms	NDRG1; N-myc downstream regulated 1; GC4; RTP; DRG1; NDR1; NMSL; TDD5; CAP43; CMT4D; HMSNL; RIT42; TARG1; PROXY1; protein regulated by oxygen-1; tunicamycin-responsive protein; differentiation-related gene 1 protein; nickel-specific induction protein Cap43; reducing agents and tunicamycin-responsive protein; DRG-1; DRG1; Protein NDRG1; N-myc downstream-regulated gene 1 protein; Rit42
Gene ID	10397
mRNA Refseq	NM_001135242
Protein Refseq	NP_001128714
MIM	605262

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UniProt ID	Q92597
Chromosome Location	8q24
Function	protein binding

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