

NDRG1 Human

Catalogue Number: PRO-724

Synonyms	<p>Protein NDRG1, N-myc downstream-regulated gene 1 protein, Differentiation-related gene 1 protein, Reducing agents and tunicamycin-responsive protein, Nickel-specific induction protein Cap43, DRG-1, RTP, Rit42, NDRG1, CAP43, DRG1, GC4, NDR1, NMSL, TDD5, CMT4D, HMSNL, TARG1, PROXY1.</p>
Introduction	<p>NDRG1 is a cytoplasmic protein that is involved in stress responses, hormone responses, cell growth, and differentiation. NDRG1 is one of 4 members of the NDRG ?/?-hydrolase family. NDRG1 is classified in databases as a tumor suppressor and heavy metal-response protein. NDRG1's functions include cell-cycle regulation, cellular differentiation, apoptosis, hypoxia response and metal-ion sensing. NDRG1 is also essential for p53-mediated caspase activation and apoptosis. The NDRG1 is a Rab4a effector that is involved in vesicular recycling of E-cadherin. NDRG1 is ubiquitous; it is expressed most notably in placental membranes and prostate, kidney, small intestine, and ovary tissues. NDRG1 has reduced expression in adenocarcinomas compared to normal tissues.</p> <p>NDRG1 gene mutations are reported to be the cause for hereditary motor and sensory neuropathy-Lom (HMSNL), which is a severe autosomal recessive form of Charcot- Marie-Tooth (CMT) disease. In addition, decreased NDRG1 expression in glioma is linked to tumor progression. On the other hand, overexpression of NDRG1 is connected to malignant status of esophageal cancer. NDRG1 may also have a role in portal vein invasion and intrahepatic metastasis in human hepatocellular carcinoma.</p>
Description	<p>NDRG1 Human Recombinant fused with 8 amino acid His tag at C-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 402 amino acids (1-394 a.a.) and having a molecular mass of 43.9 kDa.</p>
Source	<p>The NDRG1 is purified by proprietary chromatographic techniques.</p>
Physical Appearance	<p>Escherichia Coli.</p> <p>Sterile Filtered colorless solution.</p>

Formulation	The NDRG1 solution contains 20mM Tris-HCl buffer (pH8.0), 0.1mM PMSF and 10% Glycerol.
Stability	NDRG1 although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Purity	Greater than 95.0% as determined by SDS-PAGE.
Amino acid sequence	MSREMQDVDL AEVKPLVEKG ETITGLLQEF DVQEQDIETL HGSVHVTLCG TPKGMRPVIL TYHDIGMNHK TCYNPLFNYE DMQEITQHFA VCHVDAPGQQ DGAASFPAGY MYPMSDQLAE MLPGVLQQFG LKSIIGMGTG AGAYILTRFA LNNPEMVEGL VLINVNPCAE GWMDWAASKI SGWTQALPDM VVSHLFGKEE MQSNVEVVHT YRQHIVNDMN PGNLHLFINA YNSRRDLEIE RPMPGTHTVT LQCPALLVVG DSSPAVDVAVV ECNSKLDPTK TTLLKMADCG GLPQISQPAK LAEAFKYFVQ GMGYMPSASM TRLMRSRTAS GSSVTSLDGT RSRSH TSEGT RSRSH TSEGT RSRSH TSEGA HLDITPNSGA AGNSAGPKSM EVSCLEHHHH HH.
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