Product Name: **KD-Validated Phospho-NDRG1 (Ser330) Recombinant Rabbit Monoclonal Antibody**

Catalog #: **KVAb00729**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 42.8kDa

Antigen Information

Gene Name	NDRG1
Alternative Names	NDRG1; N-Myc Downstream Regulated 1; DRG1; RTP; CAP43; TDD5; NDR1; Reducing Agents And Tunicamycin-Responsive Protein; N-Myc Downstream-Regulated Gene 1 Protein; Nickel-Specific Induction Protein Cap43; Differentiation-Related Gene 1 Protein; Protein NDRG1; DRG-1; Protein Regulated By Oxygen-1; PROXY1; CMT4D; HMSNL; RIT42; TARG1; Rit42; NMSL; GC4
Gene ID	10397.0
SwissProt ID	Q92597
Immunogen	A synthesized peptide derived from human Phospho-NDRG1 (Ser330)

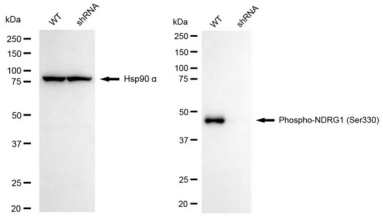
Background

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]

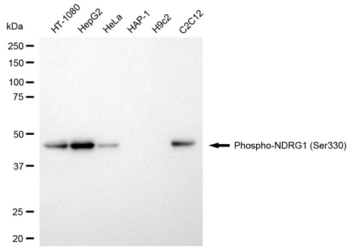
Research Area

Neuroscience,Epigenetics and Nuclear Signaling,Cancer

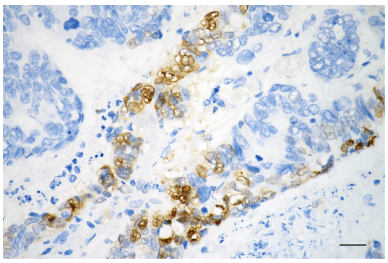
Image Data



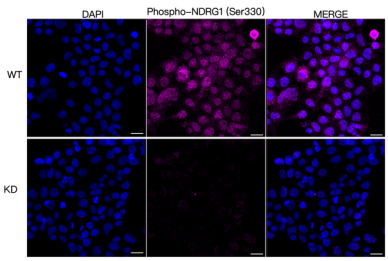
Western blotting analysis using phospho-NDRG1 (Ser330) antibody (KVAb00729). Phospho-NDRG1 (Ser330) expression in wild-type (WT) and NDRG1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. NDRG1, N-myc downstream regulated 1.



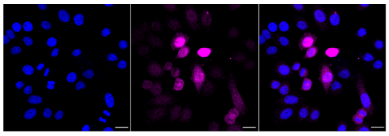
Western blotting analysis using phospho-NDRG1 (Ser330) antibody (KVAb00729). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



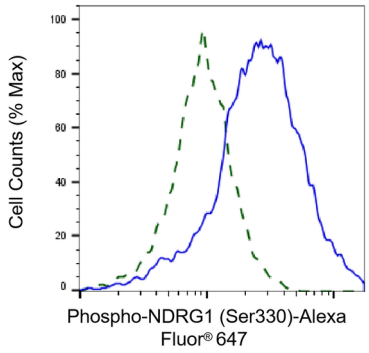
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



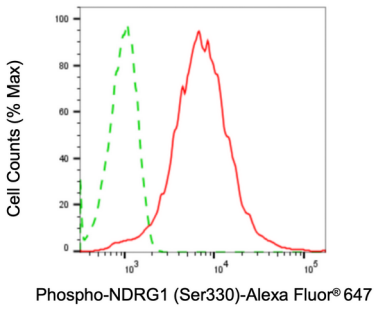
Immunocytochemical staining of HeLa cells using phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:1,000), Top panel: wild-type (WT); Bottom panal: NDRG1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Phospho-NDRG1 (Ser330) was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HepG2 cells with Phospho-NDRG1 (Ser330) antibody(KVAb00729, 1:1,000) . Nuclei were stained blue with DAPI; Phospho-NDRG1 (Ser330) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Validation of NDRG1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of phospho-NDRG1 (Ser330) expression in HepG2 cells using phospho-NDRG1 (Ser330) antibody (KVAb00729, 1:2,000). Green, isotype control; red, phospho-NDRG1 (Ser330).