

# Anti-NDRG2 antibody [EPR11910] - BSA and Azide free ab240181

Recombinant RabMAb

7 Images

### Overview

<b>Product name</b>	Anti-NDRG2 antibody [EPR11910] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR11910] to NDRG2 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Specificity</b>	<p>The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.</p> <p>This antibody does not cross-react with human NDRG4.</p>
<b>Tested applications</b>	<p><b>Suitable for:</b> IP, IHC-P, WB</p> <p><b>Unsuitable for:</b> Flow Cyt (Intra) or ICC/IF</p>
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human fetal kidney, Human astrocytoma; Human skeletal muscle and Human lung carcinoma tissues; IP: HepG2
<b>General notes</b>	<p>ab240181 is the carrier-free version of <a href="#">ab174850</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> </ul>

- Animal-free production

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR11910
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab240181 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>IP</b>		Use at an assay dependent concentration.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 41 kDa.

**Application notes** Is unsuitable for Flow Cyt (Intra) or ICC/IF.

## Target

**Function** May be involved in dendritic cell and neuron differentiation. May have anti-tumor activity.

**Tissue specificity** Highly expressed in brain, heart, skeletal muscle and salivary gland, and moderately in kidney and liver. Expressed in dendritic cells, but not in other blood cells. Expression levels are low in pancreatic and liver cancer tissues; absent in meningioma. Expressed in low-grade gliomas but present at low levels in glioblastoma. Isoform 1 and isoform 2 are present in brain neurons and up-regulated in Alzheimer disease (at protein level).

**Sequence similarities** Belongs to the NDRG family.

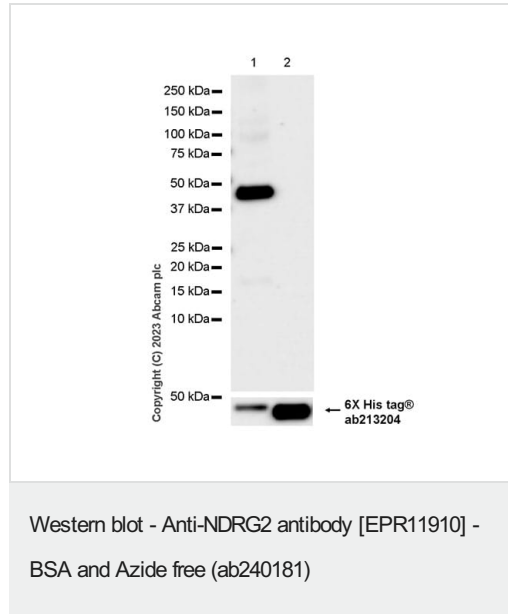
## Developmental stage

Specifically expressed during dendritic cell differentiation (in vitro). Expression is low in fetal brain and increases during brain postnatal development.

## Cellular localization

Cytoplasm. Cytoplasm > perinuclear region. Perinuclear in neurons.

## Images



**All lanes :** Anti-NDRG2 antibody [EPR11910] ([ab174850](#)) at 1/1000 dilution

**Lane 1 :** His-tagged human NDRG2 recombinant protein, 10 ng

**Lane 2 :** His-tagged human NDRG4 recombinant protein, 10 ng

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 41 kDa

**Observed band size:** 40 kDa

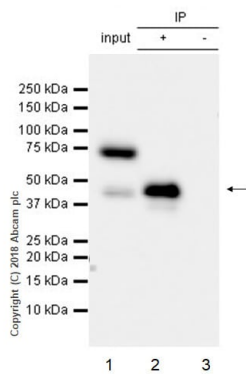
**Exposure time:** 1 second

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab174850](#)).

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

[ab213204](#) was used as total protein control at 1/5000 dilution.

This antibody does not cross-react with human NDRG4.



Immunoprecipitation - Anti-NDRG2 antibody  
[EPR11910] - BSA and Azide free (ab240181)

**ab174850** (purified) at 1:20 dilution (2µg) immunoprecipitating NDRG2 in HepG2 whole cell lysate.

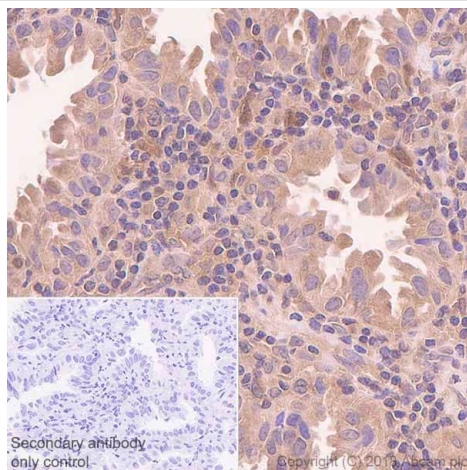
Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): **ab174850** & HepG2 whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab174850** in HepG2 whole cell lysate

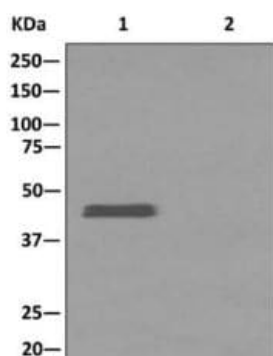
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDRG2 antibody  
[EPR11910] - BSA and Azide free (ab240181)

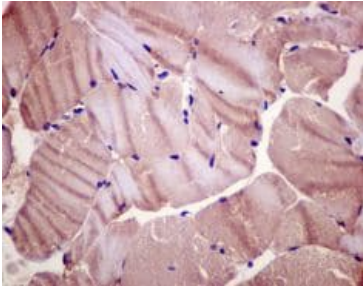
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling NDRG2 with purified **ab174850** at 1:100 dilution (2.4 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunoprecipitation - Anti-NDRG2 antibody  
[EPR11910] - BSA and Azide free (ab240181)

Western blot analysis on immunoprecipitation pellet from (1) HepG2 cells lysate or (2) 1XPBS (negative control) using **ab174850**, and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab174850**).

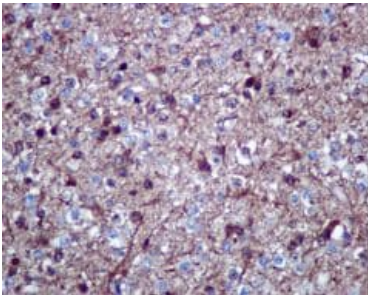


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDRG2 antibody [EPR11910] - BSA and Azide free (ab240181)

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle labeling NDRG2 using **ab174850** at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab174850**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



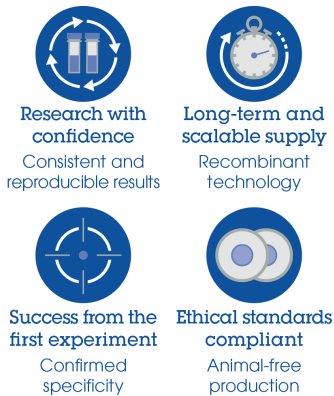
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDRG2 antibody [EPR11910] - BSA and Azide free (ab240181)

Immunohistochemical analysis of paraffin-embedded Human astrocytoma tissue labeling NDRG2 using **ab174850** at 1/50 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab174850**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

#### Why choose a recombinant antibody?



Anti-NDRG2 antibody [EPR11910] - BSA and Azide free (ab240181)

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