

## Chickens make *better* antibodies.

# **Anti-NDRG2** Antibody

Overview	
Catalog #	NDRG2-0100 (500 μL size) or NDRG2-0020 (100 μL size)
Concentration	0.2 mg/mL
Host Species	Chicken Polyclonal
Format	Affinity-Purified IgY
Buffer	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%, w/v) added as a preservative.
Applications	ICC 1:100-1:500 IHC 1:100-1:500 WB 1:500-1:1000
Species Reactivity	Human, Mouse, and Rat
Immunogen	Recombinant protein encompassing the N-terminal ~150 amino acids of human NDRG2
Molecular Weight	41 kDa
Cite this Antibody	Aves Labs Cat# NDRG2-0100 or Aves Labs Cat# NDRG2-0020; RRID: AB_3094925

#### Images



Western blotting of mock or NDRG2-FLAG transfected COS-7 cell lysates and human, mouse, and rat brain homogenates (10 ug/lane) with Aves Labs chicken anti-NDRG2 antibody (0.2 ug/ml) and detected with anti-chicken HRP. Anti-NDRG2 recognizes endogenous NDRG2 in brain homogenates in addition to exogenous NDRG2 in COS-7 cells.



COS-7 cells expressing NDRG2-FLAG were subjected to immunofluorescent staining using Aves Labs chicken anti-NDRG2 antibody (visualized in green) and rabbit anti-FLAG antibody (visualized in red). The DAPI nuclear stain (blue) shows the nuclei of both transfected and untransfected cells. The staining revealed a complete overlap between the signal from the chicken anti-NDRG2 antibody and the anti-FLAG antibody specifically in transfected cells.



Representative sections of formalin fixed, paraffin-embedded rat brain showing staining of NDRG2. The sections were stained with Aves Labs anti-NDRG2 antibody at 1:1000 dilution and detected with anti-chicken HRP.

### Details

Target Description	NDRG2, or N-myc downstream-regulated gene 2, is a downstream target of the N-myc proto-oncogene. NDRG2 was initially identified for its role in cell differentiation and response to cellular stress. Multiple studies have determined that NDRG2 mRNA is downregulated or undetectable in several human cancers, and over-expression of NDRG2 inhibited the proliferation of cancer cells. Commonly regarded as a tumor suppressor, NDRG2 also plays a crucial role in regulating cell proliferation, apoptosis, and metastasis. In neuroscience, studies of astrocytes in the central nervous system have implicated NDRG2 in the pathogenesis of many neurological diseases not limited to tumors; including stroke, neurodegenerative diseases, and psychiatric disorders. Its involvement in maintaining the integrity of the blood-brain barrier adds to its significance in neurobiology (Takarada-Iemata et al. Glia, 2018). Drug therapies to modulate the expression of NDGR2 may be able to help patients suffering from disease states ranging from multiple cancer types to Alzheimer's, Parkinson's, and depression.
Purification Method	Eggs from hens hyperimmunized with target were used to prepare an IgY fraction which was then subjected to antigen-specific affinity purification.
Quality Control Tests	Each new lot of this antibody is tested in WB to confirm that it recognizes a single immunoreactive band of expected molecular weight when used to probe brain lysate.
Storage	Store at 4°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile. For longer term storage, aliquot and freeze to avoid freeze-thaw of the antibody.

#### **Our Guarantee**

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience how chickens make better antibodies.

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