

Datasheet for ABIN104564
anti-Nestin antibody (AA 1484-1500)

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Overview

Quantity:	100 µg
Target:	Nestin (NES)
Binding Specificity:	AA 1484-1500
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Nestin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids 1484-1500 of human Nestin protein. Immunogen type: Recombinant
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	Nestin (NES)
Alternative Name:	Nestin (NES Products)
Background:	Nestin, is a large intermediate filament protein (class Type VI) that was first identified with a

Target Details

monoclonal antibody by Hockfield and McKay (1985). Nestin is expressed predominantly in stem cells of the central nervous system in the neural tube. Nestin is expressed during development and in myotendinous and neuromuscular junctions. Nestin expression is restricted, typically disappearing by E18. Nestin is thought to be a reasonable neuronal marker; however, recent studies have found nestin expression in other cell types such as endothelial cells. Nestin expression is seen in almost all GBMs (Glioblastoma multiformes) and many melanomas (both primary and metastatic) but not in any metastatic carcinomas. Upon terminal neural differentiation, nestin is downregulated and replaced by neurofilaments. Synonyms: nestin, ESTM 46 antibody, FLJ 21841 antibody, FLJ21841 antibody, Intermediate filament protein antibody

Gene ID: 10763, 38176300

UniProt: [P48681](#)

Application Details

Application Notes: Affinity purified Anti-Nestin has been tested for use in ELISA, Immunohistochemistry (IHC) and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 200-220 kDa in size corresponding to Nestin protein by western blotting in the appropriate cell lysate or extract.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Publications

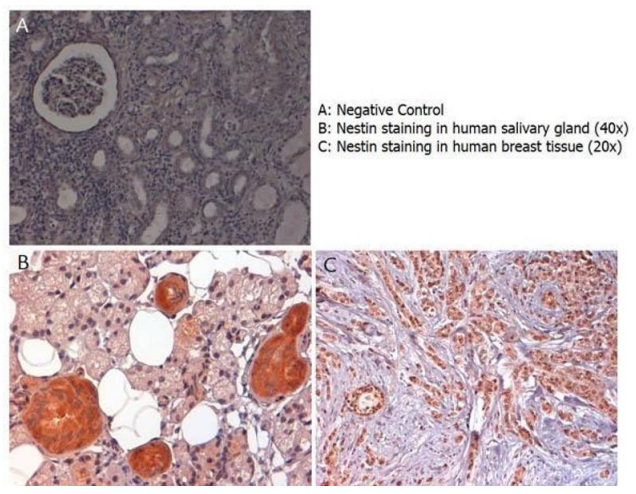
Product cited in: Maejima, Kato, Horita, Ueta, Takenoshita, Kobayashi, Shimomura: "The hypothalamus to brainstem circuit suppresses late-onset body weight gain." in: **Scientific reports**, Vol. 9, Issue 1,

pp. 18360, (2019) ([PubMed](#)).

Blume, Torner, Liu, Subburaju, Aguilera, Neumann: "Prolactin activates MAP kinase signaling and corticotropin releasing hormone (CRH) transcription in rat hypothalamic neurons." in: **Endocrinology**, (2008) ([PubMed](#)).

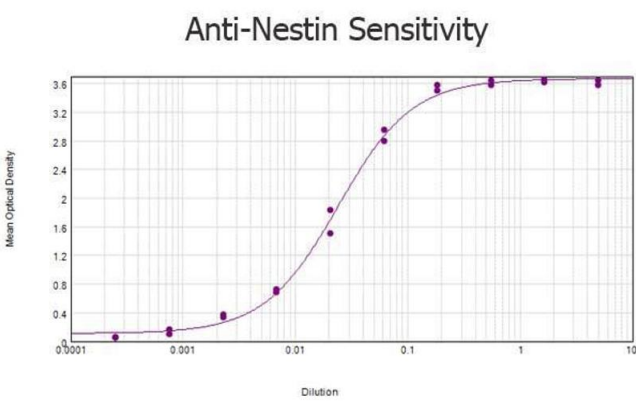
Blume, Bosch, Miklos, Torner, Wales, Waldherr, Neumann: "Oxytocin reduces anxiety via ERK1/2 activation: local effect within the rat hypothalamic paraventricular nucleus." in: **The European journal of neuroscience**, Vol. 27, Issue 8, pp. 1947-56, (2008) ([PubMed](#)).

Images



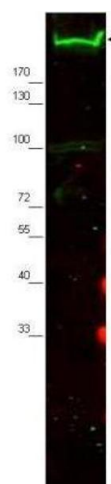
Immunohistochemistry

Image 1. Immunohistochemistry with anti-nestin antibody showing nestin staining in cytoplasm of of ductal epithelium of human salivary gland (B) and in nucleus and cytoplasm of human breast tissue (C). Formalin fixed/paraffin embedded sections were subjected to heat induced epitope retrieval (HIER) at pH 6.2 and then incubated with rabbit anti-nestin antibody at 4.0 µg/ml for 60 minutes. The reaction was developed using MACH 1 universal HRP polymer detection system and visualized with 3'3-diamino-benzidine substrate (DAB).



ELISA

Image 2. ELISA results of purified Rabbit anti-Nestin Antibody tested against BSA-conjugated peptide of immunizing peptide. Each well was coated in duplicate with 0.1µg of conjugate. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gel, Goat anti-Rabbit IgG Antibody Peroxidase Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh



Serum Proteins) and TMB ELISA Peroxidase Substrate .

Western Blotting

Image 3. Western blot using Affinity Purified anti-Nestin antibody shows detection of a band ~220 kDa corresponding to mouse Nestin (arrowhead). Approximately 30 g of MEF whole cell lysate was separated by SDS-PAGE using a 4-20% gradient gel. After transfer onto nitrocellulose, the membrane was blocked and then probed with the primary antibody diluted to 1:2,000 overnight at 4°C. The membrane was then washed and reacted with a 1:10,000 dilution of 800 conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature. IRDye800 fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN104564.