10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Nestin (RABBIT) Antibody
Nestin Antibody
Catalog # ASR5212

Specification

Anti-Nestin (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**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.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-Nestin affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 1484-1500 of human Nestin protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Nestin (RABBIT) Antibody - Additional Information

Gene ID 10763

Other Names
10763

Purity
This affinity purified antibody is directed against human Nestin protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with Nestin protein from human and Mesocricetus auratus (100% homology). Based on protein sequence homology also expect partial reactivity against Nestin homologues from mouse (93%) and rat (88%). Reactivity against homologues from other sources is not known.

Storage Condition
Store anti-Nestin at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear

after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Nestin (RABBIT) Antibody - Protein Information

Name NES

Function
Required for brain and eye development. Promotes the disassembly of phosphorylated vimentin intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division. Required for survival, renewal and mitogen- stimulated proliferation of neural progenitor cells (By similarity).

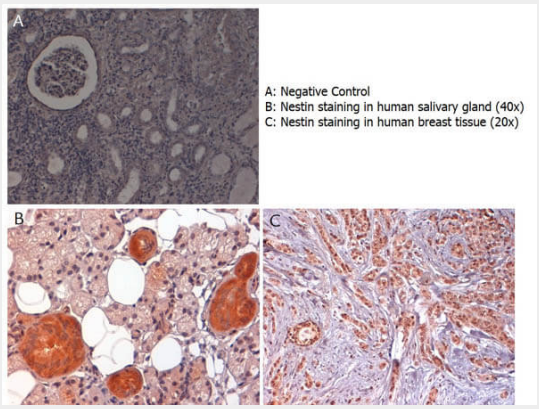
Tissue Location
CNS stem cells.

Anti-Nestin (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Nestin (RABBIT) Antibody - Images



Immunohistochemistry with anti-nestin antibody showing nestin staining in cytoplasm 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).

Anti-Nestin (RABBIT) Antibody - Background

Nestin, is a large intermediate filament protein (class Type VI) that was first identified with a 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.