

Product Datasheet

Chickens make better antibodies.

Anti-Synaptotagmin-1 Antibody

Overview

Catalog # STG

Concentration 400 μg/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.

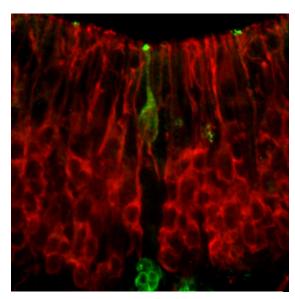
Applications IHC 1:1000-1:2000 ICC 1:1000-1:2000 WB 1:1000-1:2000

Species ReactivityHuman, Mouse, and Rat **Immunogen**Synthetic peptides

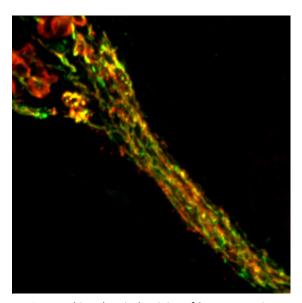
Molecular Weight 48 kDa

Cite this Antibody Aves Labs Cat# STG, RRID: AB_2313562

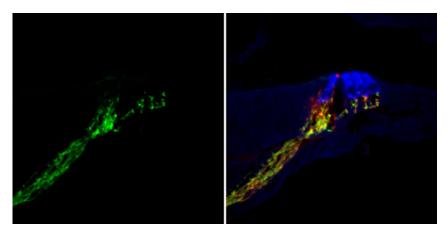
Images



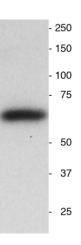
Immunohistochemical staining of Synaptotagmin-1 (green, 1:1000 dilution) and Vimentin (red, Rockland, 1:500 dilution) in a cryostat section through the basal plate of an e16 mouse brain.



Immunohistochemical staining of Synaptotagmin (green, 1:1000 dilution) and NFH (red, Rockland, 1:500 dilution) in a cryostat section through the Cochlear nerve in an adult mouse.



Immunohistochemical staining of Synaptotagmin (green, 1:1000 dilution) and NFH (red, Rockland, 1:500 dilution) and Vimentin (blue) in a cryostat section through the Cochlear nerve and Organ of Corti in an adult mouse.



Western blot of neonatal mouse brain homogenate. 25 ug of total protein added to each lane. Note the single band at the correct molecular weight. Hoda Ilias, Aves Labs.

Details

Target Description

Human Synaptotagmin-1 is a 47,442 dalton protein (422 amino acids) associated with presynaptic terminals of the PNS and CNS. Synaptotagmin-1 binds calcium and initiates the fusion of vesicles with the pre-synaptic membrane. This protein also is believed to be the target of proteolytic activity associated with Botulinum neurotoxin A.

Purification Method

Chickens were immunized with four synthetic peptide / keyhole limpet hemocyanin (KLH) conjugates. These synthetic peptides corresponded to different regions of the Synaptotagmin-1 gene product, but are shared between the human (NP_005630, NCBI) and mouse (NP_033332, NCBI) sequences. After repeated injections into the hens, immune eggs were collected, and the IgY fractions were purified from the yolks. These IgY fractions were then affinity purified using a peptide column, and the concentrations of the eluates adjusted to 400 $\mu g/mL$. Finally, equal volumes of each of the three affinity-purified anti-peptide antibodies were mixed, and the preparation was filter-sterilized.

Quality Control Tests

Each of the three antibodies were analyzed by immunohistochemistry (at a dilution of 1:2000) using fluorescein-labeled goat anti-chicken IgY (1:500 dilution, Aves Labs Cat.# F-1005) as the secondary reagent.

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.

Note: For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, viewable on our website.