

Product Specification Sheet

**Neuroigin 1 (NLGN1) Antibodies**

<b>Cat # NLGN11-P</b>	Human NLGN1 Control/Blocking Peptide	<b>SIZE:</b> 100 µg
<b>Cat # NLGN11-A</b>	Rabbit anti-human NLGN1 IgG (affinity pure)	<b>SIZE:</b> 100 µg

**Neuroigins** are Type I membrane proteins enriched in synaptic plasma membranes and clustered in synaptic clefts and postsynaptic densities. They have been characterized as neuronal cell surface proteins and are thought to be involved in cell-cell-interactions by forming intercellular junctions through binding to beta-neurexins. They play a major role in the formation or maintenance of synaptic junctions. They are also thought to be involved in the specification of excitatory synapses. Neuroigins interact with **beta-neurexins** and this interaction is involved in the formation of functional synapses.

**NLGN1** (rat: 843aa; mouse: 843aa; human 840-aa, 94kDa, human chromosome 3q26) is one of the best studied neuroigin family members expressed predominantly in the central nervous system and localized postsynaptically in the inhibitory synapses.

**Source of Antigen, Antibodies**

<b>Antigen</b>	17- aa peptide of Human NLGN1 (Protein accession # <b>Q8N2Q7</b> ; ref. 1); designated as NLGN11-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus, Extracellular
<b>Antibody host/type</b>	Rabbit, Polyclonal IgG (Cat # NLGN11-A), purified over antigen-Agarose
<b>Secondary Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>Negative Control Ab</b>	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

**Form & Storage of Antibodies/Peptide Control**

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder

Supplied in **Buffer:** PBS+0.1% BSA

**Reconstitute powder** in PBS at 1mg/ml

**Control/blocking peptide**

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

**Reconstitute powder** in PBS at 1 mg/ml.

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4°C.

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting:** 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

**ELISA:** 1:100K; using 50-100 ng control peptide/well.

**Histochemistry & Immunofluorescence:** Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

**Specificity & Cross-reactivity**

Human NLGN11-P peptide sequence is 100% homologous to mouse and rat NLGN1 protein. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

**General References:**

(1) Lezcano, N (2000) Science 287, 1660-1664

**List of related items, data sheets, and publications, using ADI antibodies is posted on the web site**

\*This product is for in vitro research use only.

**Related material available from ADI**

Antibodies to human/ moue/ rat NLGN1-4

NLGN11-A-P

80115J

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)