

**Product Specification Sheet**  
**Neuroigin 3 (NLGN3) Antibodies**

<b>Cat # NLGN31-P</b>	Human NLGN3 Control/Blocking Peptide	<b>SIZE:</b> 100 µg
<b>Cat # NLGN31-A</b>	Rabbit anti-human NLGN3 IgG (affinity pure)	<b>SIZE:</b> 100 µg

**Neuroigin**s 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. Neuroigin)s interact with **beta-neurexins** and this interaction is involved in the formation of functional synapses.

**NLGN3** (rat: 848aa; mouse: 825aa; human 848-aa, 94KDa, chromosome Xq13) is mainly localized to glia and also to pancreas. Defects in NLGN3 has been linked to X-linked autism, and Asperger Syndrome. NLGN3 may play a role in the formation or maintenance of synaptic junctions and glia-glia or glia-neuron interactions in the developing peripheral nervous system.

**Source of Antigen, Antibodies**

<b>Antigen</b>	17- aa peptide of Human NLGN3 (Protein accession # <b>Q9NZ94</b> ; ref. 1); designated as NLGN31-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus, extracellular
<b>Antibody host/type</b>	Rabbit, Polyclonal IgG (Cat # NLGN31-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 µg/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Control/blocking peptide**

100 µg/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 NLGN31-P peptide sequence is 93.7% homologous to both mouse and rat NLGN3 protein sequence. 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 µg control peptide per 1 µg of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

**General References:**

(1) Nagase T., et al., (2000) DNA Res. 7: 65-73

**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 NLGN1, NLGN2 and NLGN4

NLGN31-A-P 80115J

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