



anti-Pam-Igloo-L

anti *Periplaneta americana* Igloo L 1-75
rabbit, polyclonal

Cat. No.	Amount
ABD-060	100 µl

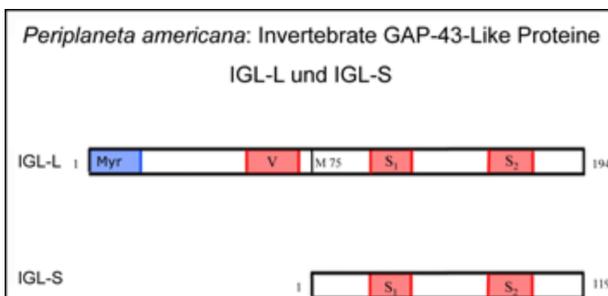


Fig. 1

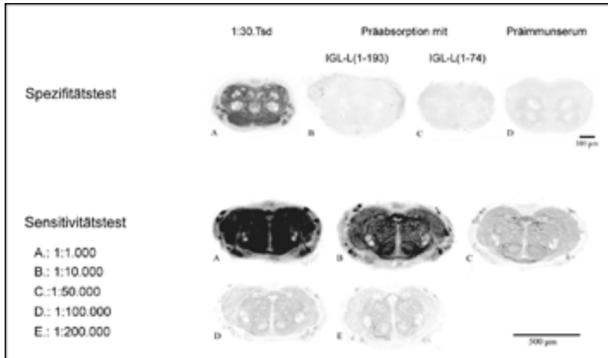


Fig. 2

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid (Supplied as serum, preserved in glycerol)

Applications:

Anti-Pam-Igloo-L can be used for ELISA and Immunocytochemistry.

Description:

Axogenesis and synaptic signal transmission in the vertebrate nervous system are based on the abundant expression of the growth-associated protein GAP-43. In non-vertebrates a GAP-43 related gene (*igloo*, invertebrate GAP-43 like) was found in *Drosophila* and encodes two proteins, IGLOO-L and IGLOO-S, with sequence homology and similar biochemical activity to GAP-43. We have cloned a GAP-43-like gene in a holometabolic insect, the American cockroach, *Periplaneta americana*. As for *Drosophila*, we found two putative *igloo* mRNAs, *igloo-L* and *igloo-S*, in the cockroach (Fig. 1). Immunocytochemical investigations with an antiserum to Pam-Igloo L and Pam-Igloo S provide a function for Pam-Igloo L in establishment or maintenance of synaptic contacts and can help to understand the ongoing expression of GAP-43 in the mature nervous system (Hänold, 2004).

Specificity:

The specificity against P-IGL-L, but not P-IGL-S, was demonstrated by transfected CHO cells, where the antibody selectively recognizes IGL-L. This P-IGL-L-like immunoreactivity (P-IGL-L-li) was colocalized with the fluorescence signal from the IGL-L-EGFP fusion protein. Furthermore, the antiserum was tested on neuronal tissue sections of the American cockroach: P-IGL-L-li could be blocked by preincubation of the antibody with recombinant P-IGL-L protein. There was also no immunostaining after replacement of antiserum with preimmune serum (Fig 2). The specificity of the antiserum against *Periplaneta americana* IGL-L was investigated by immunostaining of brain sections from different cockroach species.

Selected References:

Hänold R, Dissertation, Friedrich-Schiller-Universität Jena (2004) Klonierung, Überexpression und immunocytochemische Lokalisation des axonalen Wachstumsfaktors GAP-43 bei Insekten: Invertebrate GAP-43 like Protein

Hänold et al. (2003) Immunocytochemical localization of IGL, a new GAP-43 like gene product in different developmental stages of the American cockroach. 29. Goettingen Neurobiology Conference 921, p931
<http://nwg.glia.mdccberlin.de/media/pdf/conference/proceedings> (2003)



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Neel *et al.* (1994) Igloo, a GAP-43-related gene expressed in the developing nervous system of *Drosophila*. *Development* 120:2235.