

Product datasheet for **TA326524**

Dlg1 Mouse Monoclonal Antibody [Clone ID: S64-15]

Product data:

Product Type:	Primary Antibodies
Clone Name:	S64-15
Applications:	IHC, WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Fusion protein amino acids 1-104 of rat SAP97
Formulation:	PBS pH7.4, 50% glycerol
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	discs large homolog 1, scribble cell polarity complex component
Database Link:	NP_036920 Entrez Gene 1739 HumanEntrez Gene 13383 MouseEntrez Gene 25252 Rat Q62696

[View online »](#)

Background:

Synapse-Associated Protein 97 (SAP97/human homologue of Drosophila discs-large tumor suppressor or HDLG) is one of a family of plasma membrane-associated proteins found in synaptic junctions. This is a novel, presynaptic membrane protein homologous to SAP90 and the Drosophila discs-large tumor suppressor protein. SAP97 has three ~90 amino acid repeats called PDZ domains, a single interior SH3 domain, and a carboxyl-terminal guanylate kinase homology (GuK) domain that is enzymatically inactive. It is hypothesized that PDZ-domain interactions play a role in receptor and channel clustering which contributes to neuronal plasticity. SAP97 is believed to participate in the clustering of certain proteins, including N-methyl-D-aspartate (NMDA) receptors and Shaker-type potassium channels at the synaptic membrane. There are two principal modes of interaction between SAP97 and other proteins. NMDA receptors and Shaker-type potassium channels both share C-terminal sequence homology consisting of a threonine/serine-X-valine-COOH (T/SXV) motif. Other neuronal proteins that share this motif (beta 1 adrenergic receptor, some serotonin receptors, some sodium channel subunits, and additional potassium channel subunits) may interact with SAP97 by binding to its PDZ domains. Neuronal nitric oxide synthase (nNOS), which lacks the T/SXV motif but which has its own PDZ domain, has been shown to associate with SAP97 in vitro through a pseudo-homotypic PDZ-PDZ interaction.

Synonyms:

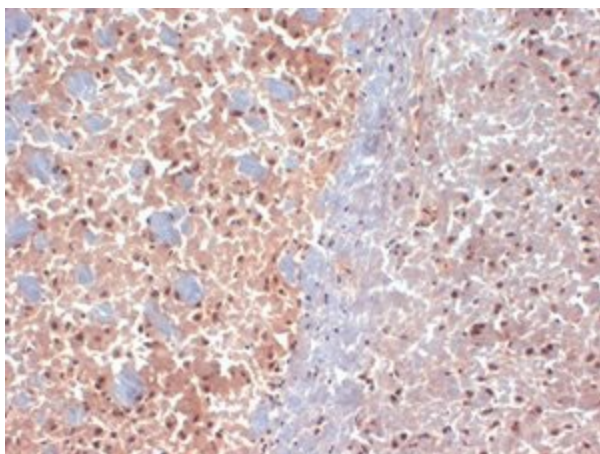
dj1061C18.1.1; DKFZp761P0818; DKFZp781B0426; DLGH1; hdlg; OTTHUMP00000165203; SAP-97; SAP97

Note:

Detects ~130kDa. No cross-reactivity against PSD95, SAP102 and Chapsyn110 expressed in transfected cells.

Product images:


Western blot analysis of SAP97 on rat brain membrane tissues using a 1:1000 dilution of the antibody



IHC analysis of SAP97 in frozen sections of mouse brain extract using the antibody