Synaptic Systems

Rudolf-Wissell-Str. 28
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

GRIP

Cat.No. 151-0P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg protein, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 662 to 769 from rat GRIP (UniProt Id: P97879)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	151 002, 151 003
Remarks	This control protein consists of the recombinant protein of rat GRIP (aa 662 - 769) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of protein needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The **g**lutamate **r**eceptor **i**nteracting **p**rotein **GRIP** is a post-synaptic scaffolding protein consisting of seven PDZ domains. It has been shown to interact with a diverse array of proteins like several AMPA receptors, HAP1-A, liprin-α and LAR receptor protein tyrosine phosphatases (LAR-RPTPs). GRIP is also involved in the synaptic targeting of AMPA receptors.

Selected General References

The proteoglycan NG2 is complexed with alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors by the PDZ glutamate receptor interaction protein (GRIP) in glial progenitor cells. Implications for glial-neuronal signaling.
Stegmüller J, Werner H, Nave KA, Trotter J
The Journal of biological chemistry (2003) 278(6): 3590-8.

The PDZ proteins PICK1, GRIP, and syntenin bind multiple glutamate receptor subtypes. Analysis of PDZ binding motifs.
Hirbec H, Perestenko O, Nishimune A, Meyer G, Nakanishi S, Henley JM, Dev KK
The Journal of biological chemistry (2002) 277(18): 15221-4.

Evidence that GRIP, a PDZ-domain protein which is expressed in the embryonic forebrain, co-activates transcription with DLX homeodomain proteins.
Yu G, Zerucha T, Ekker M, Rubenstein JL
Brain research. Developmental brain research (2001) 130(2): 217-30.

EphrinB ligands recruit GRIP family PDZ adaptor proteins into raft membrane microdomains.
Brückner K, Pablo Labrador J, Scheiffele P, Herb A, Seeburg PH, Klein R
Neuron (1999) 22(3): 511-24.

GRIP: a synaptic PDZ domain-containing protein that interacts with AMPA receptors.
Dong H, O'Brien RJ, Fung ET, Lanahan AA, Worley PF, Huganir RL
Nature (1997) 386(6622): 279-84.