Recombinant Conus striatus Con-ikot-ikot

Catalog No: #AP70981

Package Size: #AP70981-1 20ug #AP70981-2 100ug #AP70981-3 1mg

Signalway Antibody
Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Recombinant Conus striatus Con-ikot-ikot
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:38-123aaSequence Info:Full Length
Accession No.	P0CB20
Calculated MW	13.4 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	SGPADCCRMKECCTDRVNECLQRYSGREDKFVSFCYQEATVTCGSFNEIVGCCYGYQMCMIRVVKPNSLSG AHEACKTVSCGNPCA
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Potently and selectively blocks the desensitization of ionotropic glutamate AMPA receptor (GRIA1, GRIA2, GRIA3 and GRIA4). Can also open already desensitized GRIA1 receptors. Binds to a different site than does the drug cyclothiazide . The toxin acts like a straightjacket on the ligand-binding domain (LBD) "gating ring" of the receptor, restraining the domains via both intra- and interdimer cross-links such that agonist-induced closure of the LBD "clamshells" is transduced into an irislike expansion of the gating ring . Application of the toxin to hippocampal slices causes a large and rapid increase in resting AMPAR-mediated current leading to neuronal death .

References

X-ray structures of AMPA receptor-cone snail toxin complexes illuminate activation mechanism.Chen L., Durr K.L., Gouaux E.Science 345:1021-1026(2014)Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.