PRODUCT INFORMATION

Expression system E.coli

Domain 38-425aa

UniProt No. Q9H2B2

NCBI Accession No. NP_065834

Alternative Names Synaptotagmin-4, HsT1192, KIAA1342

PRODUCT SPECIFICATION

Molecular Weight 46.1 kDa (409aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 20% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Synaptotagmin-4, also known as SYT4, belongs to the synaptotagmin family proteins. Synaptotagmins are a large gene family of synaptic vesicle type III integral membrane proteins that function as regulators of both exocytosis and endocytosis and are involved in neurotransmitter secretion from small secretory vesicles. SYT4 is expressed in neuronal tissues, and has the highest mRNA levels in the hippocampus. The proximity of the SYT4 gene to markers of several psychiatric disorders suggest an involvement of SYT4 in human diseasee. Recombinant human SYT4 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using



conventional chromatography techniques.

Amino acid Sequence

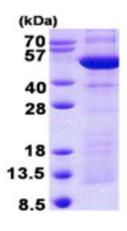
MGSSHHHHHH SSGLVPRGSH MCQRKSSKSN KTPPYKFVHV LKGVDIYPEN LNSKKKFGAD DKNEVKNKPA VPKNSLHLDL EKRDLNGNFP KTNLKPGSPS DLENATPKLF LEGEKESVSP ESLKSSTSLT SEEKQEKLGT LFFSLEYNFE RKAFVVNIKE ARGLPAMDEQ SMTSDPYIKM TILPEKKHKV KTRVLRKTLD PAFDETFTFY GIPYTQIQEL ALHFTILSFD RFSRDDIIGE VLIPLSGIEL SEGKMLMNRE IIKRNVRKSS GRGELLISLC YQSTTNTLTV VVLKARHLPK SDVSGLSDPY VKVNLYHAKK RISKKKTHVK KCTPNAVFNE LFVFDIPCEG LEDISVEFLV LDSERGSRNE VIGQLVLGAA AEGTGGEHWK EICDYPRRQI AKWHVLCDG

General References

Ferguson G D., et al. (2000) J Biol Chem. 275:36920-36926. Ibata K., et al. (2002) Neurosci Res. 43: 401-406.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)