CPLX2/Complexin-2 Protein, Human (His)

Cat. No.:	HY-P76282
Synonyms:	Complexin-2; CPX II; Synaphin-1; CPLX2
Species:	Human
Source:	E. coli
Accession:	Q6PUV4 (D2-K134)
Gene ID:	10814
Molecular Weight:	Approximately 21 kDa.

PROPERTIES

AA Sequence	D F V M K Q A L G G A T K D M G K M L G G E E E K D P D A Q K K E E E R Q E A L R Q Q E E E R K A K H A R M E A E R E K V R Q Q I R D K Y G L K K K E E K E A E E K A A L E Q P C E G S L T R P K K A I P A G C G D E E E E E E E E S I L D T V L K Y L P G P L Q D M F K K
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Complexin-2 (CPLX2) protein assumes a pivotal role in modulating synaptic vesicle dynamics within postmitotic neurons. It acts as a negative regulator, specifically impeding the formation of synaptic vesicle clusters at the active zone, thereby influencing the precise localization of vesicles to the presynaptic membrane. Intriguingly, CPLX2 also exhibits a positive regulatory impact on the later stages of exocytosis, participating in the release of various cytoplasmic vesicles, including synaptic vesicles and other secretory vesicles. Its involvement extends to mast cell exocytosis, underlining its versatile role in cellular processes. Notably, CPLX2 achieves these regulatory effects through direct binding to the SNARE core complex, a molecular ensemble encompassing SNAP25, VAMP2, and STX1A, thereby contributing to the intricate orchestration of neurotransmitter release and vesicle dynamics at the synapse.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA