

Recombinant Human Complexin-2/CPLX2 Protein (His Tag)

Catalog No. PKSH030970

Note: Centrifuge before opening to ensure complete recovery of vial contents.

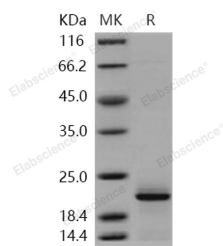
Description

Synonyms	921-L;CPX-2;CPX2;Hfb1
Species	Human
Expression Host	E.coli
Sequence	Asp 2-Lys 134
Accession	Q6PUV4-1
Calculated Molecular Weight	16.8 kDa
Observed molecular weight	21 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Complexin-2 (CPLX2), a member of the complexin/synaphin family, is a soluble pre-synaptic protein believed to regulate neurotransmitter release from pre-synaptic terminals. Complexins are soluble proteins that regulate the activity of soluble

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N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) complexes necessary for vesicle fusion. Complexins are unable to bind to monomeric SNARE proteins but bind with high affinity to ternary SNARE complexes and with lower affinity to target SNARE complexes. Complexin 1 (CX1) and complexin 2 (CX2) are presynaptic proteins that modulate neurotransmitter release and are used as markers of inhibitory and excitatory synapses, respectively. CPLX2 is localized in pre-synaptic terminals in mature brain. The G71-P89 region of CPLX2 is essential and sufficient for preferential axonal distribution. CPLX2 participates in the Ca(2+)-sensitive regulatory pathway for zymogen granule exocytosis. Complexin-2 is a key player in normal neurological function, and its downregulation could lead to changes in neurotransmitter release sufficient to cause significant behavioural abnormalities such as depression. It is involved in synaptogenesis and the modulation of neurotransmitter release.