A Reliable Research Partner in Life Science and Medicine

## Recombinant Complexin-2/CPLX2 Monoclonal Antibody

catalog number: AN300245P

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

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Reactivity Human

Immunogen Recombinant Human Complexin-2 / CPLX2 Protein

HostRabbitIsotypeIgGClone6F2PurificationProtein A

**Buffer** 0.2 μm filtered solution in PBS

Applications	Recommended Dilution			
ICC/IF	1:20-1:100			
FCM	1:25-1:100			

## **Preparation & Storage**

Storage This antibody can be stored at 2°C-8°C for one month without detectable loss of

activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.

**Shipping** Ice bag

## 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 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.