

Recombinant Human Coronin-6/CORO6 Protein(N-6His)

Cat.NO.: TP05296

3th Edition

Synonyms:Coronin-6; Clipin-E; CORO6

Description:Coronin 6, a newly identified member of the coronin family, is highly enriched at adult NMJs and regulates AChR clustering via modulating the interaction between receptors and the actin cytoskeletal network. Coronins are a family of conserved actin-binding proteins originally identified in the actin-rich structure of the amoeba *Dictyostelium discoideum* . To date, seven members of coronins have been identified in mammals, and most exhibit tissue-specific distribution patterns. Coronin 6 is prominently expressed in adult muscle and enriched at the NMJ. Studies with cultured myotubes reveal that Coronin 6 regulates both agrin- and laminin-induced AChR clustering and is important for anchoring AChRs onto the actin cytoskeleton. Also, both the C-terminal region and a conserved Arg29 residue at the N terminus of Coronin 6 are essential for its actin-binding activity and stabilization of AChR–cytoskeleton linkage. Importantly, in vivo knockdown of Coronin 6 in mouse skeletal muscle fibers leads to destabilization of AChR clusters, which demonstrates that Coronin 6 is a critical regulator of AChR clustering at the postsynaptic region of the NMJs through modulating the receptor-anchored actin cytoskeleton. The human Coronin 6 has five isoforms produced by alternative splicing, and tissue-specific expression of these isoforms are unclear.

Form:PBS

Molecular Weight:28.3 kDa

Sequences:Met 1-Asp237

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.