

## Summary

Name	Coronin-6
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ $\mu$ g as determined by LAL test.
Construction	Recombinant Human Coronin-6 is produced by our E.coli expression system and the target gene encoding Met1-Asp237 is expressed with a 6His tag at the N-terminus.
Accession #	Q6QEF8-4
Host	E.coli
Species	Human
Predicted Molecular Mass	28.3 KDa
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 150m M NaCl, 1mM DTT, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SDS-PAGE** image





## Background

**Alternative Names** Coronin-6; Clipin-E; CORO6 Background 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.

## Note

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