

Recombinant Human ADD3, His-tagged

Cat. No. ADD3-9415H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ADD3 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	C-term-343a.a.
Description	Adducins are heteromeric proteins composed of different subunits referred to as adducin alpha, beta and gamma. The three subunits are encoded by distinct genes and belong to a family of membrane skeletal proteins involved in the assembly of spectrin-actin network in erythrocytes and at sites of cell-cell contact in epithelial tissues. While adducins alpha and gamma are ubiquitously expressed, the expression of adducin beta is restricted to brain and hematopoietic tissues. Adducin, originally purified from human erythrocytes, was found to be a heterodimer of adducins alpha and beta. Polymorphisms resulting in amino acid substitutions in these two subunits have been associated with the regulation of blood pressure in an animal model of hypertension. Heterodimers consisting of alpha and gamma subunits have also been described. Structurally, each subunit is comprised of two distinct domains. The amino-terminal region is protease resistant and globular in shape, while the carboxy-terminal region is protease sensitive. The latter contains multiple phosphorylation sites for protein kinase C, the binding site for calmodulin, and is required for association with spectrin and actin. Alternatively spliced adducin gamma transcripts encoding different

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isoforms have been described. The functions of the different isoforms are not known.

Storage

The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.

Storage Buffer

1M PBS (58mM Na₂HPO₄, 17mM NaH₂PO₄, 68mM NaCl, pH8.) added with 300mM Imidazole and 0.7% Sarcosyl, 15% glycerol.

GENE INFORMATION

Gene Name

[ADD3 adducin 3 \(gamma\) \[Homo sapiens \]](#)

Official Symbol

ADD3

Synonyms

adducin 3 (gamma); ADDL; Adducin-like protein 70; gamma-adducin

Gene ID

[120](#)

mRNA Refseq

[NM_019903.3](#)

Protein Refseq

[NP_063968.1](#)

MIM

[601568](#)

UniProt ID

[Q9UEY8](#)

Chromosome Location

10q25.2

Function

actin binding;calmodulin binding;metal ion binding;protein kinase C binding;structural constituent of cytoskeleton

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