



# Recombinant Human Beta-adducin (ADD2)

<b>Product Code</b>	CSB-BP001349HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P35612
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	<p>MSEETVPEAA SPPPPQGQPY FDRFSEDDPE YMRLRNRAAD  LRQDFNLMEQ KKRVTMILQS PSFREELEGL IQEQMKKGNN SSNIWALRQI  ADFMASHTA VFPTSSMNVS MMTPINDLHT ADSLNLAKGE RLMRCKISSV  YRLLDLYGWA QLSDTYVTLR VSKEQDHFLI SPKGVSCSEV TASSLIKVNI  LGEVVEKGSS CFPVDTTGFC LHSAYIYAARP DVRCIIHLHT PATAAVSAMK  WGLLPVSHNA LLVGDMAYYD FNGEMEQEAD RINLQKCLGP TCKILVLRNH  GVVALGDTVE EAFYKIFHLQ AACEIQVSAL SSAGGVENLI LLEQEKHRPH  EVGSVQWAGS TFGPMQKSRL GEHEFEALMR MLDNLGYRTG  YTYRHPFVQE KTKHKSEVEI PATVTAFVFE EDGAPVPALR QHAQKQQKEK  TRWLNTPNNTY LRVNVADEVQ RSMGSPRPKT TWMKADEVEK SSSGMPPIRIE  NPNQFVPLYT DPQEVLEMNRN KIREQNRQDV KSAGPQSLL ASVIAEKSR  PSTESQLMSK GDEDTKDDSE ETVPNPFSQL TDQELEEYKK EVERKKLELD  GEKETAPEEP GSPAKSAPAS PVQSPAKEAE TKSPLVSPSK SLEEGTKKTE  TSKAATTEPE TTQPEGVVVN GREEEQTAEE ILSKGLSQMT TSADTDVDT  KDKTESVTSG PMSPEGSPSK SPSKKKKKFR TPSFLKKSCK KEKVES</p>
<b>Source</b>	Baculovirus
<b>Target Names</b>	ADD2
<b>Protein Names</b>	Recommended name: Beta-adducin Alternative name(s): Erythrocyte adducin subunit beta
<b>Expression Region</b>	1-726
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	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. Various adducin beta mRNAs, alternatively spliced at 3' end and/or internally spliced and encoding different isoforms, have been described. The functions of all the different isoforms are not known.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.