

## Recombinant Human ADD2 Protein, Myc/DDK-tagged, C13 and N15-labeled

**Cat. No.** ADD2-6323H    **Lot. No.** (See product label)

### SPECIFICATION

#### Product Overview

ADD2 MS Standard C13 and N15-labeled recombinant protein (NP\_059522) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

#### Species

Human

#### Source

HEK293

#### 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 transcript variants have been described.

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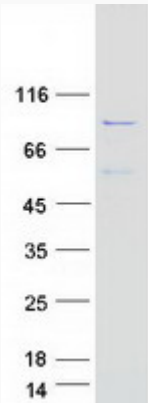
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|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b>   | 72.5 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>AA Sequence</b>      | <p>MSEETVPEAASPPPPQGQPYFDRFSEDDPEYMRLRNRAADLRQDFNLMEQKKRVT<br/> MILQSPSFREELEGLIQEQMKKGNNSSNIWALRQIADFMASHTHAVFPTSSMNVSM<br/> MTPINDLHTADSLNLAKGERLMRCKISSVYRLLDLYGWAQLSDTYVTLRVSKEQDHF<br/> LISPKGVSCSEVTASSLIKVNILGEVVEKGSSCFPVDTTGFCCLHSAIYAARPDVRCIIHL<br/> HTPATAAVSAMKWGLLPVSHNALLVGDMAYYDFNGEMEQEADRINLQKCLGPTCKI<br/> LVLRNHGVVALGDTVVEAFYKIFHLQAACEIQVSALSSAGGVENLILLEQEKHRPHEV<br/> GSVQWAGSTFGPMQKSRLGEHEFEALMRMLDNLGYRTGYTYRHPFVQEKTCHKHS<br/> EVEIPATVTAFFVEEDGAPVPALRQHAQKQKQKEKTRWLNTPTNTYLRVNVADDEVQRS<br/> MGSPRPKTTWMKADEVKSSSGMPIRIENPNQFVPLYTDPQEVLEMRNKIREQNRQ<br/> DVKSAGPQSQLLASVIAEKSRSPSTESQLMSKGEDETKDDSEETVPNPFSQLTDQE<br/> LEEYKKEVERKKLELDETGQEREPGSGPAVCEFFSVALHIWSNILERKKLPQKSLAH<br/> LQSLHLLLQCRAQRRRQRQRALTRTRPLEQKLISEEDLAANDILDYKDDDDKV</p> |
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Stability</b>        | Stable for 3 months from receipt of products under proper storage and handling conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage</b>          | Store at -80 centigrade. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Concentration</b>    | 50 µg/mL as determined by BCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Buffer</b>   | 100 mM glycine, 25 mM Tris-HCl, pH 7.3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>GENE INFORMATION</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Gene Name</b>        | ADD2 adducin 2 [ Homo sapiens (human) ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Official Symbol</b>  | ADD2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|-----------------------|-------------------------------------------------------------------------------------|
| <b>Synonyms</b>       | ADD2; adducin 2 (beta); beta-adducin; ADDB; erythrocyte adducin subunit beta;       |
| <b>Gene ID</b>        | 119                                                                                 |
| <b>mRNA Refseq</b>    | NM_017488                                                                           |
| <b>Protein Refseq</b> | NP_059522                                                                           |
| <b>MIM</b>            | 102681                                                                              |
| <b>UniProt ID</b>     | P35612                                                                              |
| <b>SDS-PAGE</b>       |  |