

## Product datasheet for PH319229

### BCAT1 (NM\_005504) Human Mass Spec Standard

#### Product data:

|                                       |   |
|---------------------------------------|---|
| Product Type:                         | Mass Spec Standards   |
| Description:                          | BCAT1 MS Standard C13 and N15-labeled recombinant protein (NP_005495)   |
| Species:                              | Human   |
| Expression Host:                      | HEK293  |
| Expression cDNA Clone or AA Sequence: | RC219229  |
| Predicted MW:                         | 42.8 kDa  |
| Protein Sequence:                     | >RC219229 representing NM_005504<br>Red=Cloning site Green=Tags(s)<br><br>MKDCSNGCSAECTGEGGSKEVVGTFKAKDLIVTPATILKEKDPNNLVFGTVFTDHMLTVEVSSEFGWEK<br>PHIKPLQNLSLHPGSSALHYAVELFEGLKAFRGVDNKIRLFQPNLMDRMYSRAVRATLPVFDKEELLEK<br>IQQLVKLDQEWVPYSTSASLYIRPTFIGTEPSLGVKKPTKALLFVLLSPVGPYFSSGTFNPVSLWANPKY<br>VRAWKGGTGDCKMGGNYGSSLFAQCEAVDNGCQQLWL YGEDHQITEVGTMNLFL YWINEDGEEELATPP<br>LDGIILPGVTRRCILDLAHQWGEFKVSERYLTMDLTTALEGNRVREMFSGGTACVVCPSDILYKGETI<br>HIPTMENGPKLASRILSKLTDIQYGREESDWTIVLS<br><br>TRTRPLEQKLI SEEDLAANDILDYKDDDDKV |
| Tag:                                  | C-Myc/DDK   |
| Purity:                               | > 80% as determined by SDS-PAGE and Coomassie blue staining   |
| Concentration:                        | >0.05 µg/µL as determined by microplate BCA method  |
| Labeling Method:                      | Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine  |
| Buffer:                               | 25 mM Tris-HCl, 100 mM glycine, pH 7.3  |
| Storage:                              | Store at -80°C. Avoid repeated freeze-thaw cycles.  |
| Stability:                            | Stable for 3 months from receipt of products under proper storage and handling conditions.  |
| RefSeq:                               | <a href="#">NP_005495</a>   |
| RefSeq Size:                          | 8191  |
| RefSeq ORF:                           | 1158  |
| Synonyms:                             | BCATC; BCT1; ECA39; MECA39; PNAS121; PP18   |
| Locus ID:                             | 586   |



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UniProt ID: [P54687](#), [A0A024RAV0](#)

Cytogenetics: 12p12.1

**Summary:** This gene encodes the cytosolic form of the enzyme branched-chain amino acid transaminase. This enzyme catalyzes the reversible transamination of branched-chain alpha-keto acids to branched-chain L-amino acids essential for cell growth. Two different clinical disorders have been attributed to a defect of branched-chain amino acid transamination: hypervalinemia and hyperleucine-isoleucinemia. As there is also a gene encoding a mitochondrial form of this enzyme, mutations in either gene may contribute to these disorders. Alternatively spliced transcript variants have been described. [provided by RefSeq, May 2010]

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Pantothenate and CoA biosynthesis, Valine, leucine and isoleucine biosynthesis, Valine, leucine and isoleucine degradation

### Product images:



Coomassie blue staining of purified BCAT1 protein (Cat# [TP319229]). The protein was produced from HEK293T cells transfected with BCAT1 cDNA clone (Cat# [RC219229]) using MegaTran 2.0 (Cat# [TT210002]).