

## Product datasheet for PH300637

### ABI2 (NM\_005759) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ABI2 MS Standard C13 and N15-labeled recombinant protein (NP_005750)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200637
Predicted MW:	52.4 kDa
Protein Sequence:	>RC200637 protein sequence Red=Cloning site Green=Tags(s)

MAELQMLLEEEIPGGRRALFDSYTNLERVADYCENNYIQSADKQRALEETKAYTTQSLASVAYLINTLAN  
NVLQMLDIQASQLRRMESSINHISQTVDIHKEKVARREIGILTTNKNTSRTHKIIAPANLERPVRVYIRKP  
IDYTILDDIGHGVKYSTQNMKGGLPRTTPPTQKPPSPPMGKGTGRHSPYRTLEPVRPPVVPNDYVPS  
PTRNMAPSQQSPVRTASVNQRNRTYSSSGSSGSHPSRSSSRENSGSGSVGVPIAVPTSPSPVFGHP  
VQFYSMNRPASRHTPPTIGGSLPYRRPPSITSQTSLQNMGGPFYSQNPVSLAPPPSILQVTPQLPLM  
GFVARVQENISDTPPPPPPVEEPVFDESPPPPPPEDYEEEEAAVVEYSDPYAEEDPPWAPRSYLEKVVVA  
IYDYTKDKEDELSFQEGAIYVIKKNDDGWYEGVMNGVTGLFPGNYVESIMHYSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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:	<u>NP_005750</u>
RefSeq Size:	6533
RefSeq ORF:	1425
Synonyms:	ABI-2; ABI2B; AblBP3; AIP-1; AIP1; argBP1; argBPIA; argBPIB; SSH3BP2



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Locus ID: 10152

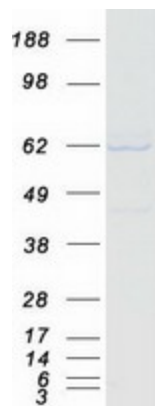
UniProt ID: [Q9NYB9](#), [Q9NYB9-2](#)

Cytogenetics: 2q33.2

**Summary:** Regulator of actin cytoskeleton dynamics underlying cell motility and adhesion. Functions as a component of the WAVE complex, which activates actin nucleating machinery Arp2/3 to drive lamellipodia formation (PubMed:21107423). Acts as regulator and substrate of nonreceptor tyrosine kinases ABL1 and ABL2 involved in processes linked to cell growth and differentiation. Positively regulates ABL1-mediated phosphorylation of ENAH, which is required for proper polymerization of nucleated actin filaments at the leading edge (PubMed:7590236, PubMed:8649853, PubMed:10498863). Contributes to the regulation of actin assembly at the tips of neuron projections. In particular, controls dendritic spine morphogenesis and may promote dendritic spine specification toward large mushroom-type spines known as repositories of memory in the brain (By similarity). In hippocampal neurons, may mediate actin-dependent BDNF-NTRK2 early endocytic trafficking that triggers dendrite outgrowth (By similarity). Participates in ocular lens morphogenesis, likely by regulating lamellipodia-driven adherens junction formation at the epithelial cell-secondary lens fiber interface (By similarity). Also required for nascent adherens junction assembly in epithelial cells (PubMed:15572692).[UniProtKB/Swiss-Prot Function]

**Protein Pathways:** Regulation of actin cytoskeleton

### Product images:



Coomassie blue staining of purified ABI2 protein (Cat# [TP300637]). The protein was produced from HEK293T cells transfected with ABI2 cDNA clone (Cat# [RC200637]) using MegaTran 2.0 (Cat# [TT210002]).