

## Product datasheet for PH301198

## OriGene Technologies, Inc.

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## Antizyme inhibitor 1 (AZIN1) (NM 148174) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** AZIN1 MS Standard C13 and N15-labeled recombinant protein (NP\_680479)

Species: Human **HEK293 Expression Host:** 

**Expression cDNA Clone** 

or AA Sequence:

RC201198

Predicted MW:

49.5 kDa

>RC201198 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MKGFIDDANYSVGLLDEGTNLGNVIDNYVYEHTLTGKNAFFVGDLGKIVKKHSQWQNVVAQIKPFYTVKC NSAPAVLEILAALGTGFACSSKNEMALVQELGVPPENIIYISPCKQVSQIKYAAKVGVNILTCDNEIELK KIARNHPNAKVLLHIATEDNIGGEEGNMKFGTTLKNCRHLLECAKELDVQIIGVKFHVSSACKESQVYVH ALSDARCVFDMAGEIGFTMNMLDIGGGFTGTEFQLEEVNHVISPLLDIYFPEGSGVKIISEPGSYYVSSA FTLAVNIIAKKVVENDKFPSGVEKTGSDEPAFMYYMNDGVYGSFASKLSEDLNTIPEVHKKYKEDEPLFT SSLWGPSCDELDQIVESCLLPELNVGDWLIFDNMGADSFHEPSAFNDFQRPAIYYMMSFSDWYEMQDAGI

TSDSMMKNFFFVPSCIQLSQEDSFSAEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

**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-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stable for 3 months from receipt of products under proper storage and handling conditions. Stability:

RefSeq: NP 680479

RefSeg Size: 4239 RefSeq ORF: 1344

Synonyms: AZI; AZI1; AZIA1; OAZI; OAZIN; ODC1L





**Locus ID:** 51582

**UniProt ID:** O14977, A0A024R9C7

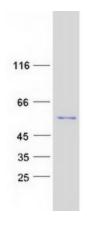
Cytogenetics: 8q22.3

**Summary:** The protein encoded by this gene belongs to the antizyme inhibitor family, which plays a role

in cell growth and proliferation by maintaining polyamine homeostasis within the cell. Antizyme inhibitors are homologs of ornithine decarboxylase (ODC, the key enzyme in polyamine biosynthesis) that have lost the ability to decarboxylase ornithine; however, retain the ability to bind to antizymes. Antizymes negatively regulate intracellular polyamine levels by binding to ODC and targeting it for degradation, as well as by inhibiting polyamine uptake. Antizyme inhibitors function as positive regulators of polyamine levels by sequestering antizymes and neutralizing their effect. This gene encodes antizyme inhibitor 1, the first member of this gene family that is ubiquitously expressed, and is localized in the nucleus and cytoplasm. Overexpression of antizyme inhibitor 1 gene has been associated with increased proliferation, cellular transformation and tumorigenesis. Gene knockout studies showed that homozygous mutant mice lacking functional antizyme inhibitor 1 gene died at birth with abnormal liver morphology. RNA editing of this gene, predominantly in the liver tissue, has been linked to the progression of hepatocellular carcinoma. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Sep 2014]

**Protein Families:** Druggable Genome

## **Product images:**



Coomassie blue staining of purified AZIN1 protein (Cat# [TP301198]). The protein was produced from HEK293T cells transfected with AZIN1 cDNA clone (Cat# [RC201198]) using MegaTran 2.0 (Cat# [TT210002]).