

Product datasheet for **TP762540**

Antizyme inhibitor 1 (AZIN1) (NM_015878) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human antizyme inhibitor 1 (AZIN1), transcript variant 1, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the region full length of AZIN1
Tag:	N-GST and C-HIS
Predicted MW:	49.5 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50mM Tris, pH8.0, 8M Urea
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_056962
Locus ID:	51582
UniProt ID:	O14977 , A0A024R9C7
RefSeq Size:	4385
Cytogenetics:	8q22.3
RefSeq ORF:	1344
Synonyms:	AZI; AZI1; AZIA1; OAZI; OAZIN; ODC1L



[View online »](#)

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 #TP762540). The protein was produced from E.coli.