

Product datasheet for **AR50906PU-N**

AKB ligase / GCAT (22-419, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	AKB ligase / GCAT (22-419, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MSALAQLRGI LELELEGIRG AGTWKSERVI TSRQGPHIRV DGVSGGILNF CANNYLGLSS HPEVIQAGLQ ALEEFAGLS SVRFICGTQS IHKNLEAKIA RFHQREDAIL YPCYDANAG LFEALLTPED AVLSDELNHA SIIDGIRLCK AHKYRHRHLD MADLEAKLQE AQKHRLRLVA TDGAFSMDGD IAPLQEICCL ASRYGALVFM DECHATGFLG PTGRGTDELL GVMDQVTIIN STLGKALGGA SGGYTTGPGP LVSLLRQRAR PYLFSNSLPP AVVGCASKAL DLLMGSNTIV QSMAAKTQRF RSKMEAAGFT ISGASHPICP VMLGDARLAS RMADDMLKRG IFVIGFSYPV VPKGKARIRV QISAVHSEED IDRCVEAFVE VGRLHGALP
Tag:	His-tag
Predicted MW:	45.0 kDa
Concentration:	lot specific
Purity:	>85% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant human GCAT protein, fused to His-tag at N-terminus, was expressed in E.coli.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001165161
Locus ID:	23464
UniProt ID:	O75600
Cytogenetics:	22q13.1
Synonyms:	KBL



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Summary:

The degradation of L-threonine to glycine consists of a two-step biochemical pathway involving the enzymes L-threonine dehydrogenase and 2-amino-3-ketobutyrate coenzyme A ligase. L-Threonine is first converted into 2-amino-3-ketobutyrate by L-threonine dehydrogenase. This gene encodes the second enzyme in this pathway, which then catalyzes the reaction between 2-amino-3-ketobutyrate and coenzyme A to form glycine and acetyl-CoA. The encoded enzyme is considered a class II pyridoxal-phosphate-dependent aminotransferase. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 14. [provided by RefSeq, Jan 2010]

Protein Pathways:

Glycine, serine and threonine metabolism

Product images: