

## 32-2352: GCAT Recombinant Protein

**Alternative Name :** 2-amino-3-ketobutyrate coenzyme A ligase mitochondrial,AKB ligase,EC 2.3.1.29,Aminoacetone synthase,Glycine acetyltransferase,GCAT,KBL.

### Description

Source : Escherichia Coli. GCAT Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 419 amino acids (22-419 a.a) and having a molecular mass of 45kDa.GCAT is fused to a 21 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. L-threonine to glycine degradation consists of a two-step biochemical pathway which involves the enzymes L-threonine dehydrogenase and 2-amino-3-ketobutyrate coenzyme A ligase. L-Threonine is initially converted into 2-amino-3-ketobutyrate by L-threonine dehydrogenase. Glycine C-Acetyltransferase (GCAT) is the 2nd enzyme in this pathway, which subsequently catalyzes the reaction between 2-amino-3-ketobutyrate and coenzyme A to form glycine and acetyl-CoA. The GCAT enzyme is regard as a class II pyridoxal-phosphate-dependent aminotransferase. GCAT is strongly expressed in the heart, brain, liver and pancreas. GCAT is also found in lung.

### Product Info

**Amount :** 20 µg

**Purification :** Greater than 85.0% as determined by SDS-PAGE.

**Content :** GCAT protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.4M urea and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSSLVPRGSH MSALAQLRGI LELEGIRG AGTWKSERVI TSRQGPHERV DGVSGGILNF CANNYLGLSS HPEVIQAGLQ ALEEFGAGLS SVRFICGTQS IHKNLEAKIA RFHQREDAIL YPSCYDANAG LFEALLTPED AVLSDELNHA SIIDGIRLCK AHKYRYRHLD MADLEAKLQE AQKHRLRLVA TDGAFSMDGD IAPLQEICCL ASRYGALVFM DECHATGFLG PTGRGTDELL GVMDQVTIIN STLGKALGGA SGGYTTGPGP LVLLRQRAR PYLFSNSLPP AVVGCASKAL DLLMGSNTIV QSMAAKTQRF RSKMEAAGFT ISGASHPICP VMLGDARLAS RMADDMLKRG IFVIGFSYPV VPKGKARIRV QISAVHSEED IDRCVEAFVE VGRHLHGALP.

