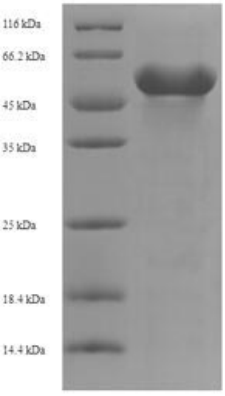
Recombinant Human Kynurenine/alpha-aminoadipate aminotransferase, mitochondrial (AADAT)

Product Code	CSB-EP843276HU
Relevance	Transaminase with broad substrate specificity. Has transaminase activity towards aminoadipate, kynurenine, methionine and glutamate. Shows activity also towards tryptophan, aspartate and hydroxykynurenine. Accepts a variety of oxo-acids as amino-group acceptors, with a preference for 2-oxoglutarate, 2-oxocaproic acid, phenylpyruvate and alpha-oxo-gamma-methiol butyric acid. Can also use glyoxylate as amino-group acceptor (in vitro).
Abbreviation	AADAT
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8N5Z0
Alias	2-aminoadipate aminotransferase2-aminoadipate transaminase (EC:2.6.1.39)Alpha-aminoadipate aminotransferase ;AadATKynurenine aminotransferase IIKynurenine--oxoglutarate aminotransferase IIKynurenine--oxoglutarate transaminase 2 (EC:2.6.1.7)Kynurenine--oxoglutarate transaminase II
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PKSMISLAGGLPNPNMFPFKTAVITVENGKTIQFGEEMMKRALQYSPSAGIPEL LSWLKQLQIKLHNPPTIHYPPSQGQMDLCVTSGSQQGLCKVFEMIINPGDNVL LDEPAYSGTLQSLHPLGCNIINVASDESGIVPDSLRDILSRWKPEDAKNPQKNT PKFLYTVPNGNNPTGNSLTSERKKEIYELARKYDFLIIEDDPYYFLQFNKFRVPT FLSMDVDGRVIRADSFSKIISSGLRIGFLTGPKPLIERVILHIQVSTLHPSTFNQL MISQLLHEWGEEGFMAHVDRVIDFYSNQKDAILAAADKWLTGLAEWHVPAAG MFLWIKVKGINDVKELIEEKAVKMGVLMLPGNAFYVDSSAPSPYLRASFSSASP EQMDVAFQVLAQLIKESL
Lead Time	3-7 business days
Research Area	Signal Transduction
Source	E.coli
Gene Names	AADAT
Protein Names	Recommended name: Kynurenine/alpha-aminoadipate aminotransferase, mitochondrial Short name= KAT/AadAT Alternative name(s): 2-aminoadipate aminotransferase 2-aminoadipate transaminase EC= 2.6.1.39 Alpha-

	aminoadipate aminotrans
Expression Region	30-425aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	60.2kDa
Protein Description	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Constructing a plasmid that codes for the Human AADAT protein (30-425aa) is the initial step to yield the recombinant Human AADAT protein. The plasmid is then transferred into e.coli cells. Positive e.coli cells are selected and cultured for the protein expression. A N-terminal 6xHis-SUMO tag is fused to the protein. The affinity purification is used to purify the protein, and SDS-PAGE analysis is carried out to verify the presence and assess the purity of the protein. The protein possesses a purity exceeding 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.