

Recombinant human PAICS protein

Catalog Number: ATGP2628

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-425aa

UniProt No.

P22234

NCBI Accession No.

NP_001072992

Alternative Names

Multifunctional protein ADE2, ADE2, ADE2H1, AIRC, PAIS

PRODUCT SPECIFICATION

Molecular Weight

49.5 kDa (448aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol 0.1M NaCl,1mM DTT

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

PAICS, also known as phosphoribosylaminoimidazole carboxylase, is an enzyme involved in nucleotide biosynthesis and in particular in purine biosynthesis. It catalyzes the conversion of 5'-phosphoribosyl-5-aminoimidazole (AIR) into 5'-phosphoribosyl-4-carboxy-5-aminoimidazole (CAIR) as described in the reaction. Recombinant human PAICS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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Amino acid Sequence

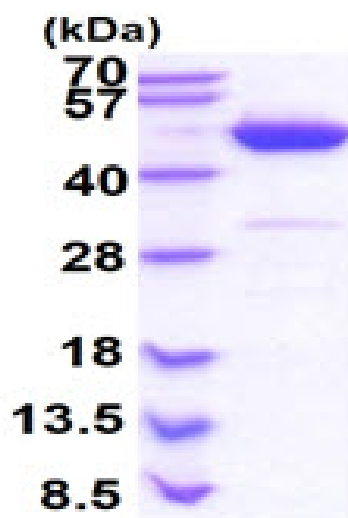
MGSSHHHHHH SSSLVPRGSH MGSMATAEVL NIGKKLYEGK TKEVYELLD S PGKVLLQSKD QITAGNAARK NHLEGKAAIS
NKITSCIFQL LQEAGIKTAF TRKCGETAFI APQCEMPIE WVCRRITGS FLKRNPVKE GYKFYPPKVE LFFKDDANND
PQWSEEQLIA AKFCFAGLLI GQTEVDIMSH ATQAI FEILE KSWLPQNCTL VDMKIEFGVD VTTKEIVLAD VIDNDSWRLW
PSGDRSQKD QOSYRDLKEV TPEGLQMVKK NFEWVAERVE LLLKSESQCR VVLMGSTSD LGHCEKIKKA CGNFGIPCEL
RVTSAHKGPD ETLRIKAEYE GDGIPTVFVA VAGRSNGLGP VMSGNTAYPV ISCPPLTPDW GVQDVWSSLR LPSGLGCSTV
LSPEGSAQFA AQIFGLSNHL VWSKLRASIL NTWISLKQAD KKIRECNL

General References

Ealick SE. et al. (1999) Structure. 7:1395-1406
Meyer E. et al. (1999) Biochemistry. 38:3012-3018.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)