

**PAICS, 1-425aa, Human, His tag, E.coli**

**Cat.NO.: TP03285**

3th Edition

**Synonyms:**Multifunctional protein ADE2, ADE2, ADE2H1, AIRC, PAIS

**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.

**Form:**Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol 0.1M NaCl,1mM DTT

**Molecular Weight:**49.5 kDa(448aa) confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSMATAEVLNIGKKLYEGKTKEVYELLDSPGKVLLQSKDQITAGNAARKNHLEG  
KAAISNKITSCIFQLLQEAGIKTAFTRKCGETAFAIAPQCEMPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFK  
DDANNDPQWSEEQLIAAKFCFAGLLIGQTEVDIMSHATQAIFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVID  
NDSWRLWPSGDRSQQKDKQSYRDLKEVTPEGLQMVKKNFVVAERVELLLKSESQCRVVVLMGSTSDLGHCEKI  
KKACGNFGIPCELRVTSAHKGPDETLRIKAEYEGDIPTVFVAVAGRSNGLPVMMSGNTAYPVISCPPLTPDWGVQ  
DVWSSLRLPSGLGCSTVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKIRECNL

**Purity:**> 95% by HPLC

**Concentration:**0.25 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.