

**GALT, 1-379aa, Human, His tag, E.coli**

**Cat.NO.: TP02192**

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3th Edition

**Synonyms:**Galactose-1-phosphate uridylyltransferase, Gal-1-P uridylyltransferase, UDP-glucose--hexose-1-phosphate uridylyltransferase

**Description:**GALT catalyzes the second step of the Leloir pathway of galactose metabolism, namely the conversion of UDP-glucose + galactose-1-phosphate to glucose-1-phosphate + UDP-galactose. The absence of this enzyme results in classic galactosemia in humans and can be fatal in the newborn period if lactose is not removed from the diet. The pathophysiology of galactosemia has not been clearly defined. Two transcript variants encoding different isoforms have been found for this gene. Recombinant human GALT protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques

**Form:**Liquid. In 20mM Tris-HCl buffer (pH 8.5) containing 0.2M NaCl, 10% glycerol.

**Molecular Weight:**45.9 kDa (403aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSHMSRSGTDPQQRQQASEADAAAATFRANDHQHIRYNPLQDEWVLVSAHR  
MKRPWQQQVEPQLLKTVPRHDPLNPLCPGAIRANGEVNPQYDSTFLFDNDFPALQPDAPSPGPSDHPLFQAKSAR  
GVCKVMCFHPWSDVTLPLMSVPEIRAVVDAWASVTEELGAQYPWVQIFENKGAMMGCSNPHPHCQVWASSFLP  
DIAQREERSQQAYKSQHGEPLLMEYSRQELLRKERLVLTSSEHWLVLPFWATWPYQTLLLPRRHVRRLPELTPAE  
RDDLASIMKLLTKYDNLFETSFPYSMGWHGAPTGSEAGANWNHWQLHAHYYPLLRSATVRKFMVGYEMLAQA  
QRDLTPEQAAERLRALPEVHYHLGQKDRETATIA

**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.