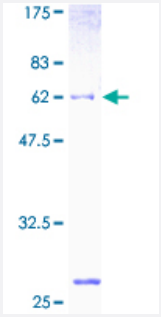
Full-Length

GALE (Human) Recombinant Protein (P01)

Catalog # H00002582-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human GALE full-length ORF (AAH01273, 1 a.a. - 348 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MAEKVLVTGGAGYIGSHTVLELLEAGYLPVVIDNFHNAFRGGGSLPESLRRVQELTGRSVEFEEM DILDQGALQRLFKKYSFMAVIHFAGLKAVGESVQKPLDYYRVNLTGTIQLLEIMKAHGVKNLVFSSS ATVYGNPQYLPLDEAHPTGGCTNPYGKSKFFIEEMIRDLCQADKTWNAVLLRYFNPTGAHASGCIG EDPQGIPNNLMPYVSQVAIGRREALNVFGNDYDTEDGTGVRDYIHVVDLAKGHIAALRKLKEQCG CRIYNLGTGTGYSVLQMVQAMEKASGKKIPYKVVARREGDVAACYANPSLAQEELGWTAALGLD RMCEDLWRWQKQNPSGFGTQA
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	64.02
Interspecies Antigen Sequence	Rat (93)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — GALE

Entrez GeneID	2582
GeneBank Accession#	BC001273
Protein Accession#	AAH01273
Gene Name	GALE
Gene Alias	FLJ95174, FLJ97302, SDR1E1
Gene Description	UDP-galactose-4-epimerase
Omim ID	230350 606953
Gene Ontology	Hyperlink
Gene Summary	This gene encodes UDP-galactose-4-epimerase which catalyzes two distinct but analogous reactions: the epimerization of UDP-glucose to UDP-galactose, and the epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The bifunctional nature of the enzyme has the important metabolic consequence that mutant cells (or individuals) are dependent not only on exogenous galactose, but also on exogenous N-acetylgalactosamine as a necessary precursor for the synthesis of glycoproteins and glycolipids. Mutations in this gene result in epimerase-deficiency galactosemia, also referred to as galactosemia type 3, a disease characterized by liver damage, early-onset cataracts, deafness and mental retardation, with symptoms ranging from mild ('peripheral' form) to severe ('generalized' form). Multiple alternatively spliced transcripts encoding the same protein have been identified. [provided by RefSeq

Other Designations	OTTHUMP00000002991|OTTHUMP00000044857|UDP galactose-4'-epimerase|galactose-4-epimerase, UDP-|galactowaldenase|short chain dehydrogenase/reductase family 1E, member 1

Pathway

- Amino sugar and nucleotide sugar metabolism
- Galactose metabolism
- Metabolic pathways