10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GLCE Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56192

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O94923
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70101
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GLCE
Epitope Specificity	541-617/617
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus membrane; Single-pass type II membrane protein
SIMILARITY	Belongs to the D-glucuronyl C5-epimerase family.
SUBUNIT	Interacts with HS2ST1 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GLCE (glucuronic acid epimerase), also known as HSEPI (heparin/heparan sulfate:glucuronic acid C5-epimerase) or D-glucuronyl C5-epimerase, is a single-pass type II membrane protein that is part of the golgi apparatus and, through its enzymatic activity, is essential for proper biological function of heparan sulphate (HS). GLCE epimerizes D-glucuronic acid into L-iduronic acid of HS, thus changing the specificity of HS and allowing it to bind to cytokines and growth factors. GLCE is a target of the beta-catenin–TCF4 transactivation complex; an essential component in the Wnt/APC/beta-catenin signaling pathway that is upregulated in colon carcinoma cells. The enzymatic activity of GLCE is enhanced by overexpression of beta-catenin–TCF4, suggesting a possible role for GLCE in the dysregulation of proper signaling pathways; a dysregulation that leads to the development of human epithelial tumors.

Additional Information

Gene ID	26035
Other Names	D-glucuronyl C5-epimerase, 5.1.3.17, Heparan sulfate C5-epimerase, Hsepi, Heparin/heparan sulfate:glucuronic acid C5-epimerase, Heparosan-N-sulfate-glucuronate 5-epimerase, GLCE, KIAA0836 {ECO:0000312|EMBL:BAA74859.1}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GLCE
Synonyms	KIAA0836 {ECO:0000312|EMBL:BAA74859.1}
Function	Converts D-glucuronic acid residues adjacent to N-sulfate sugar residues to L-iduronic acid residues, both in maturing heparan sulfate (HS) and heparin chains. This is important for further modifications that determine the specificity of interactions between these glycosaminoglycans and proteins.
Cellular Location	Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9EPS3}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q9EPS3}