Data Sheet (Cat.No.TMAB-06282)

Anti-Galactosylceramidase Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Rat (predicted:Mouse,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Molecular Weight:	Theoretical: 73 kDa. Actual: 73 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Paraformaldehyde-fixed, paraffin embedded (rat liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Galactosylceramidase) Polyclonal Antibody, Unconjugated (TMAB-06282) at 1: 400 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining. 2. Sample: Lane 1: Human HUVEC cell Lysates Lane 2: Human U-2 OScell Lysates Primary: Anti-Galactosylceramidase (TMAB-06282) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 73 kDa Observed band size: 73 kDa
Application:	WB,IHC-P,IHC-Fr,IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human Galactosylceramidase
Antigen Species:	Human
Gene ID:	2581
Uniprot ID:	P54803

Research Background

GALC is a lysosomal enzyme that hydrolyzes galactose ester bonds in various galactolipids, including galactosylceramide, galactosylsphingosine, lactosylceramide and monogalactosyldiglyceride. Galactolipids contain glucose and/or galactose, and are found in the brain and other nerve tissue, especially the myelin sheath. Galactosylceramide is a major lipid in myelin, kidney, and epithelial cells of the small intestine and colon. Mutations in the GALC gene that compromise protein function correlate to Krabbe disease (globoid cell leukodystrophy, GLD). GLD is an autosomal recessive condition that affects approximately 1 in 150,000 infants and results in progressive destruction of the nervous system. The “twitcher” mouse is a model system for GLD; the genotype is a premature

stop codon (W339X) in the galactosylceramidase (GALC) gene that abolishes enzymatic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481