

Galc Polyclonal Antibody

Catalog number: 11991-1-AP

Size: 51 µg/150 µl

Source: Rabbit

Isotype: IgG

Synonyms:

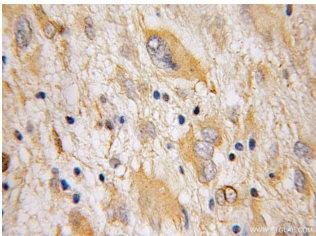
Galc; 2310068B06Rik,

A930008M05Rik, AW212969,

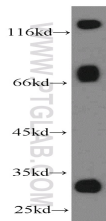
AW413532, Gacy,

galactosylceramidase, Galc, twi,

twitcher



Immunohistochemical of paraffin-embedded human gliomas using 11991-1-AP (Galc antibody) at dilution of 1:50 (under 10x lens)



mouse brain tissue were subjected to SDS PAGE followed by western blot with 11991-1-AP (Galc antibody) at dilution of 1:300

Background

The GALC antibody targets the liposomal enzyme Galactosylceramidase (GALC), which belongs to the glycosyl hydrolase 59 family. It hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. It is primarily found in the brain and kidneys where galactolipids are hydrolyzed (PMID:8634707). Deficiencies of GALC are primarily associated with the autosomal recessive Krabbe's disease. This disease is characterized by developmental delay caused by apoptosis of myelin-forming cells. GALC is responsible for hydrolyzing galactosylceramide, a cerebroside that is an important component of myelin. A deficiency in GALC causes loss of myelin to nerve cells, resulting in delayed nerve transmissions. Krabbe's disease has varying degrees of severity due to a large number of different genetic mutations in the gene. The GALC antibody can be used to detect the deletions in the GALC gene and functions of the enzyme (PMID:20886637). Normal GALC mRNA encodes the 80 kDa precursor, which is processed into 50 and 30 kDa subunits. (PMID:8634707)

Applications

Tested applications:	ELISA, WB, IHC
Cited applications:	IF, IHC, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Mouse, zebrafish
Calculated Galc MW:	77 kDa
Observed Galc MW:	80kd, 30kd
Positive WB detected in	Mouse brain tissue, A375 cells
Positive IHC detected in	Human gliomas tissue
Recommended dilution:	WB: 1:500-1:5000 IHC: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag3914
GenBank accession number:	BC086671
Gene ID (NCBI):	14420
Full name:	Galactosylceramidase

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.