For Research Use Only

CoraLite® Plus 488-conjugated Galc Polyclonal antibody



Catalog Number: CL488-11991

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL488-11991 BC086671 GeneID (NCBI): 100ul, Concentration: 1000 ug/ml by 14420

Nanodrop: **UNIPROT ID:** P54818

Rabbit Full Name:

Isotype: galactosylceramidase IgG Calculated MW: Immunogen Catalog Number: 77 kDa AG3914 Observed MW:

80 kDa, 30 kDa, 50 kDa

Purification Method:

Antigen affinity purification Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

IF-P

Species Specificity: human, mouse, rat

Positive Controls:

IF-P: mouse brain tissue,

Background Information

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 myelinforming 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: 26865610).

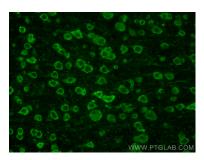
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CoraLite® Plus 488 Galc antibody (CL488-11991) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).