#### For Research Use Only

# CoraLite® Plus 488-conjugated Galc Polyclonal antibody



Catalog Number: CL488-11991

Featured Product

#### **Basic Information**

Catalog Number: CL488-11991

Size: 1000 µg/ml Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG3914

80 kDa, 30 kDa, 50 kDa

galactosylceramidase Calculated MW: 77 kDa

Observed MW:

Full Name:

BC086671

14420

P54818

GeneID (NCBI):

**UNIPROT ID:** 

GenBank Accession Number:

**Purification Method:** 

Antigen affinity purification Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

### **Applications**

**Tested Applications:** 

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

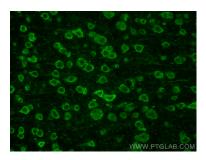
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

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).