

**BP133****Polyclonal Antibody to Galactocerebroside - Serum****Quantity:**

0.1 ml

**Background:**

Galactocerebroside is a surface antigen typically found on newly differentiated or developing oligodendrocytes.

Galactosylceramidase hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. It is an enzyme with very low activity responsible for the lysosomal catabolism of galactosylceramide, a major lipid in myelin, kidney and epithelial cells of small intestine and colon.

It shows highest level of activity in testes compared to brain, kidney, placenta and liver. It can also be found in urine.

Defects in Galactosylceramidase are the cause of globoid cell leukodystrophy (GLD); also known as Krabbe disease. This autosomal recessive disorder results in the insufficient catabolism of several galactolipids that are important in the production of normal myelin. Clinically, the most frequent form is the infantile form. Most patients (90%) present before six months of age with irritability, spasticity, arrest of motor and mental development, and bouts of temperature elevation without infection. This is followed by myoclonic jerks of arms and legs, oposthotonus, hypertonic fits, and mental regression, which progresses to a severe decerebrate condition with no voluntary movements and death from respiratory infections or cerebral hyperpyrexia before 2 years of age. However, a significant number of cases with later onset, presenting with unexplained blindness, weakness and/or progressive motor, and sensory neuropathy that can progress to severe mental incapacity and death, have been identified.

**Host:**

Rabbit

**Immunogen:**

Galactocerebroside purified from Bovine brain.

**Format:****State:** Liquid Serum without additives.**Applications:****ELISA:** 1/50-1/100.

**Immunohistochemistry on Frozen Sections:** 1/10-1/50; For staining of living cells it is recommended that the antisera be heat inactivated prior to using to remove complement. The recommended fixative is 4% paraformaldehyde.

**Immunofluorescence:** 1/10-1/50; The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. We recommends the use of acetone fixation for frozen sections.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody recognises Galactocerebroside, a surface antigen typically found on newly differentiated or developing oligodendrocytes.

Staining of live cells prior to fixation will show a typical "patching" appearance. Cells fixed prior to staining will have a more solid, "smooth" appearance.

- Species Reactivity:**      **Tested:** Bovine, Mouse.  
   **Expected from sequence similarity:** Human, Rat.
- Storage:**                      Store the antibody (in aliquots) at -20 °C.  
   Avoid repeated freezing and thawing.  
   Shelf life: one year from despatch.