Ganglioside GT1b . trisodium salt (bovine brain)

Brain ganglioside

Gangliosides consist of a ceramide moiety, an oligosaccharide head group, and one or more sialic acids. They are involved in a variety of cellular functions acting as cell adhesion receptors and immunological receptors via the binding of lectins; contributing to cell differentiation, cell signaling, and oncogenesis; participating in myelin stability and nerve regeneration; and operating as an entry point for toxins and viruses. Ganglioside GT1b consists of a tetra-saccharide core with two sialic acid on the internal galactose and an extra sialic acid on the non-reducing terminal galactose. Ganglioside GT1b prevents neurotoxicity of glutamate on neuronal cells and binds to the neurotoxins Botulinum Toxin serotype A (BTxA), BTxA heavy chain, and Tetanus Toxin with respective IC50 values of 11, 0.74, and 7.2 µM. Treatment of human PBMC with Ganglioside GT1b is associated with a decrease in IgA, IgG, IgM, IL-6, and IL-10 levels.

Citations: 7 View Online »

- Highly pure Ganglioside GQ1b isolated from bovine brain
- Used for the differentiation of a variety of cells

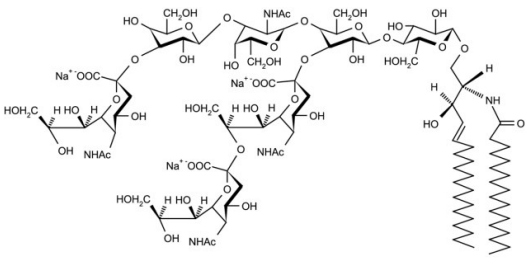
Ordering Information

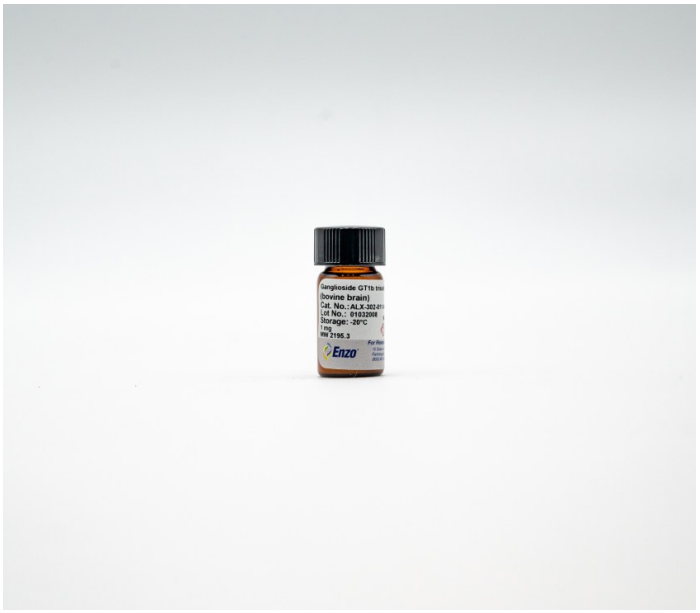
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ALX-302-011-M001	1mg
ALX-302-011-M005	5mg

Manuals, SDS & CofA

View Online »




Ganglioside GT1b
(bovine brain)
Enzo

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Handling	Protect from moisture.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	GT1b . 3Na (bovine brain), Trisialoganglioside GT1b . 3Na (bovine brain)
Appearance	White solid.
Couple Target	Clostridium botulinum, Clostridium tetani
Formula	$C_{95}H_{162}N_5O_{47}$. 3Na
Identity	Confirmed by MS.
MW	2126.3 . 69.0 (calculated on sphingosine C18:1 and stearic acid)
Purity	≥98% (TLC)
Sequence	[II^3(Neu5Ac)$_2$, IV^3(Neu5Ac)GgOse$_4$Cer] [[α-Neu5Ac-(2→3)]-β-Gal(1→3)-β-GalNAc-(1→4)-[α-Neu5Ac-(2→8)-α-Neu5Ac-(2→3)]-β-Gal-(1→4)-β-Glc-(1→1′)-Cer]
Solubility	Soluble in chloroform/methanol/DI water, 2:1:0.1; forms micellar solution in water.
Source	Bovine brain

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