

[Open Peer Review on Qeios](#)

# Monosialotetrahexosylganglioside

National Cancer Institute

## Source

National Cancer Institute. *Monosialotetrahexosylganglioside*. NCI Thesaurus. Code C107389.

A glycosphingolipid containing a sialic acid residue found in neuronal cell membranes, with potential neuroprotective and neuroregenerative activities. Upon administration, monosialotetrahexosylganglioside, also called GM-1, is able to both prevent neurologic damage and induce regeneration of damaged neurons through neurotrophic repair mechanisms, enhancement of the production of neurotrophins, and augmenting neurite outgrowth. In addition, GM-1 exerts anti-excitotoxic activity, prevents necrosis, and improves neuronal recovery and function.