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# Alpha-Gal Glycosphingolipids

National Cancer Institute

## Source

National Cancer Institute. *Alpha-Gal Glycosphingolipids*. NCI Thesaurus. Code C78200.

A preparation of glycosphingolipids (GSL), containing the disaccharide epitope galactose-alpha-1,3-galactose (alpha-Gal), with potential antineoplastic activity. Upon intratumoral injection, alpha-Gal glycosphingolipids may stimulate the immune system to mount complement-mediated cytotoxicity (CMC) and antibody-dependent cell-mediated cytotoxicity (ADCC) responses against alpha-Gal GSL, which may result in tumor cell death; these responses involve natural anti-alpha-Gal immunoglobulins (Igs). As antibodies that occur naturally due to sensitization to alpha-Gal present on symbiotic bacterial flora, anti-alpha-Gal Igs are present in unusually high amounts in human sera. GSL represent a glycolipid subtype containing the amino alcohol sphingosine; tumor-associated GSL antigens contain various oligosaccharide residues.