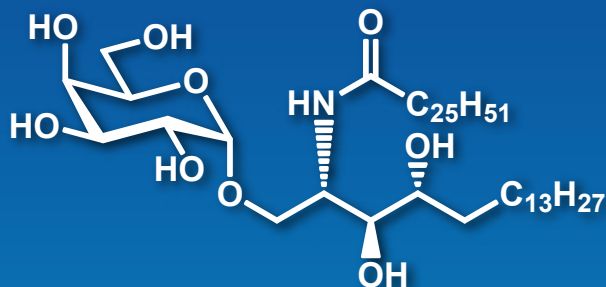


# New



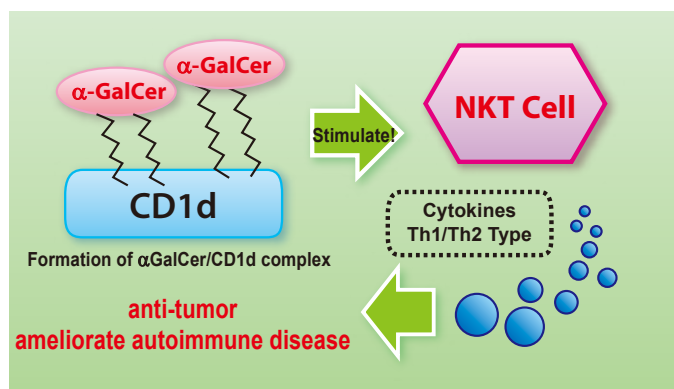
# $\alpha$ -Galactosylceramide ( $\alpha$ -GalCer)



[G0509]

## Advantages

- High purity, fully synthetic product available for scale-up
- We can accept production consultation of GMP.



$\alpha$ -Galactosyl Ceramide ( $\alpha$ -GalCer) is an artificial glycolipid which has been developed based on the sphingolipid extracted from the sea sponge, *Ageles mauritanus*. Work conducted by Prof. Taniguchi demonstrated that  $\alpha$ -GalCer forms a complex with the CD1d antigen present on cell surfaces. This complexing results in strong NKT (Natural Killer T) cell activation causing high levels of cytokine production. The NKT cells bare features of both of NK cells and T cells.

Since  $\alpha$ -GalCer is related to immune functions, it is used in disease research on cancer, atopic dermatitis and asthma and also is used as an adjuvant for experiment and research. Moreover, a synthetic intermediate of  $\alpha$ -GalCer is required in synthetic research of analogs containing different functional groups such as unsaturation and aromatic groups on the ceramide moiety which can increase biological activity of  $\alpha$ -GalCer. TCI can provide large amount of  $\alpha$ -GalCer and its intermediates synthesized in our facilities. Additionally, we can offer highly pure  $\alpha$ -GalCer for use as a standard and other applications.

- References** 1) M. Morita *et al.*, *J.Med. Chem.* **1995**, 38, 2176; T. Natori *et al.*, *Tetrahedron Lett.* **1993**, 34, 5591; T. Natori *et al.*, *Tetrahedron* **1994**, 50, 2771.  
2) T. Kawano *et al.*, *Science* **1997**, 278, 1626; N. Kamada *et al.*, *Int. Immunol.* **2001**, 13, 853.  
3) Y. Makino *et al.*, *Int. Immunol.* **1995**, 7, 1157.  
4) T. Tashiro, K. Mori, *Trends Glycosci. Glycotechnol.* **2010**, 22, 280.

## G0509 $\alpha$ -Galactosylceramide

1mg

We can create custom product compositions to suit your needs. For more information, please contact us.

For further information please refer to our website at [www.TCIchemicals.com](http://www.TCIchemicals.com).

GalCer



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