

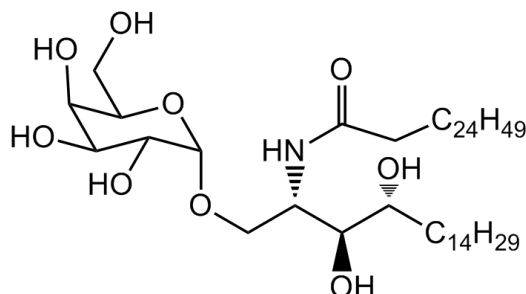
AG-CN2-0013

10-Mar-2011

α-Galactosylceramide

[α-Gal-Cer; KRN7000]

AG-CN2-0013-C250	250 µg
AG-CN2-0013-M001	1 mg
Formula	C ₅₀ H ₉₉ NO ₉
MW	858.3
CAS	158021-47-7



Handling / Storage

Shipping	BLUE ICE
Short Term Storage	+4°C
Long Term Storage	-20°C

Aliquot into glass vials.

Use / Stability

Stable for at least 2 years after receipt when stored at -20°C.

MSDS available at www.adipogen.com or upon request.

Manufactured by AdipoGen. Not sold in Japan.

Product Specifications

Source/Host	Synthetic. Originally isolated from the marine sponge <i>Agelas mauritanus</i> .
Purity	≥96% (NMR)
Identity	Identity determined by ¹ H-NMR.
Appearance	Off-white solid.
Solubility	Soluble in pyridine. Solubilization in Tween20 or PBS for cell culture use see online protocol.

Product Description

- Immunostimulant [1, 2, 3].
- Potent stimulator of natural killer T (NKT) cells [4, 5].
- Specific ligand of the lipid-binding MHC class I-like protein CD1d in human and mouse NKT cells [5].
- Protects against LPS-induced shock [7].
- Potent antitumor compound [2, 6, 8].

WARNING: Intended for research use only. This product is not intended or approved for human, diagnostics, therapeutic or veterinary use. Use of this product for human or animal testing is extremely hazardous and may result in disease, severe injury, or death. **MATERIAL SAFETY DATA:** Review the complete Material Safety Data Sheet before use.

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Product Specific References

1. Synthesis of alpha-, beta-monoglycosylceramides and four diastereomers of an alpha-galactosylceramide: M. Morita, et al.; Bioorg. Med. Chem. Lett. **5**, 699 (1995)
2. Immunostimulatory and antitumor activities of monoglycosylceramides having various sugar moieties: K. Motoki, et al.; Biol. Pharm. Bull. **18**, 1487 (1995)
3. Immunostimulatory activities of monoglycosylated alpha-D-pyranosylceramides: A. Uchimura, et al.; Bioorg. Med. Chem. **5**, 2245 (1997)
4. Activation of natural killer T cells by alpha-galactosylceramide rapidly induces the full maturation of dendritic cells in vivo and thereby acts as an adjuvant for combined CD4 and CD8 T cell immunity to a coadministered protein: Fujii S, et al.; J. Exp. Med. **198**, 267 (2003)
5. Modulation of CD1d-restricted NKT cell responses by using N-acyl variants of alpha-galactosylceramides: K.O. Yu, et al.; PNAS **102**, 3383 (2005)
6. A phase I study of alpha-galactosylceramide (KRN7000)-pulsed dendritic cells in patients with advanced and recurrent non-small cell lung cancer: A. Ishikawa, et al.; Clin. Cancer Res. **11**, 1910 (2005)
7. Pivotal advance: alpha-galactosylceramide induces protection against lipopolysaccharide-induced shock: G. Sireci, et al.; J. Leukoc. Biol. **81**, 607 (2007)
8. α -Galactosylceramide activates antitumor immunity against liver tumor: T. Tatsumi, et al.; Hepatol. Res. **41**, 160 (2011)
9. Deletion of CD1d in adipocytes aggravates adipose tissue inflammation and insulin resistance in obesity: J.Y. Huh, et al.; Diabetes **66**, 835 (2017)

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