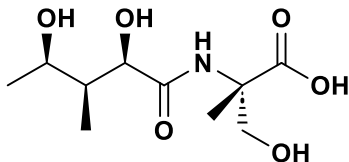


## PRODUCT DATA SHEET

### Conagenin (Immunomodulator)



### Specifications

Code No	: 16969
CAS#	: 134381-30-9
Molecular Formula	: C <sub>10</sub> H <sub>19</sub> NO <sub>6</sub>
Molecular Weight	: 249.263
Source	: <i>Streptomyces roseosporus</i>
Appearance	: Powder
Purity	: > 98% (HPLC)
Long Term Storage	: at – 20 °C
Solubility	: Soluble in H <sub>2</sub> O, MeOH, DMSO Insoluble in Hexane, EtOAc

The chemical structure was confirmed by NMR and HRMS.

### Application Notes

Conagenin was isolated from culture filtrate of *Streptomyces roseosporus* MI696-AF3 as an immunomodulator that enhanced incorporation of thymidine into T cells activated by concanavalin A.<sup>1)</sup> Conagenin enhanced production of cytokines such as IL-2, 3 and 6.<sup>2,3)</sup> Cytotoxic T lymphocytes and natural killer activities in spleens of conagenin treated mice were maintained at higher levels than those of non-treated mice.<sup>3)</sup> Phagocytosis of alveolar macrophages against opsonized-sheep red blood cells was enhanced following *in vitro* incubation with conagenin.<sup>4)</sup>

**Note:** The stock solution should be stored at 4 °C or lower and should be used within a couple of days.

### References

- 1) Conagenin, a low molecular weight immunomodulator produced by *Streptomyces roseosporus*. Yamashita T, *et al. J Antibiot.* 1991 **44**(5) 554-559.
- 2) T cell activation by conagenin in mice. Kawatsu M, *et al. J Antibiot.* 1993 **46**(11) 1687-1691.
- 3) Effect of conagenin in tumor bearing mice antitumor activity, generation of effector cells and cytokine production. Kawatsu M, *et al. J Antibiot.* 1993 **46**(11) 1692-1698.
- 4) Conagenin derived from *Streptomyces roseosporus* enhances macrophage functions. Hamada M, *et al. J Antibiot.* 1999 **52**(6) 548-551.