

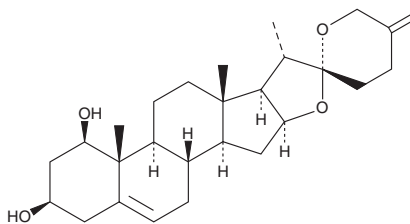
# PRODUCT INFORMATION



## Neuroscogenin

Item No. 15567

**CAS Registry No.:** 17676-33-4  
**Formal Name:** spirosta-5,25(27)-diene-1 $\beta$ ,3 $\beta$ -diol  
**Synonym:** 25(27)-Dehydroruscogenin  
**MF:** C<sub>27</sub>H<sub>40</sub>O<sub>4</sub>  
**FW:** 428.6  
**Purity:**  $\geq$ 95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

Neuroscogenin is supplied as a crystalline solid. A stock solution may be made by dissolving the neuroscogenin in the solvent of choice. Neuroscogenin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of neuroscogenin in these solvents is approximately 30 mg/ml.

Neuroscogenin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, neuroscogenin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Neuroscogenin has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Neuroscogenin is a natural saponin isolated from Butcher's broom (*R. rhizoma*), which is traditionally used against chronic venous disorders.<sup>1</sup> It is a bioavailable, potent, and high-affinity agonist of the nuclear receptor ROR $\alpha$  (EC<sub>50</sub> = 110 nM).<sup>2</sup> In mice, neuroscogenin up-regulates the expression of several ROR $\alpha$ -inducible genes in the liver, when given at 3 mg/kg/d orally for seven days.<sup>2</sup>

### References

1. Barbic, M., Willer, E.A., Rothenhöfer, M., *et al.* Spirostanol saponins and esculin from *Rusci rhizoma* reduce the thrombin-induced hyperpermeability of endothelial cells. *Phytochem.* **90**, 106-113 (2013).
2. Helleboid, S., Haug, C., Lamottke, K., *et al.* The identification of naturally occurring neuroscogenin as a bioavailable, potent, and high-affinity agonist of the nuclear receptor ROR $\alpha$  (NR1F1). *J. Biomol. Screen.* **19**(3), 399-406 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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