

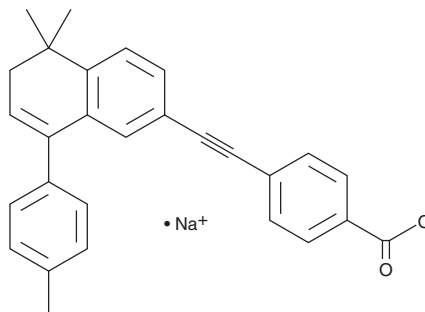
# PRODUCT INFORMATION



## AGN 193109 (sodium salt)

Item No. 23975

**CAS Registry No.:** 2319838-82-7  
**Formal Name:** 4-[2-[5,6-dihydro-5,5-dimethyl-8-(4-methylphenyl)-2-naphthalenyl]ethynyl]-benzoic acid, monosodium salt  
**Synonym:** CD3106  
**MF:** C<sub>28</sub>H<sub>23</sub>O<sub>2</sub> • Na  
**FW:** 414.5  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

AGN 193109 (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the AGN 193109 (sodium salt) in the solvent of choice. AGN 193109 (sodium salt) is slightly soluble in organic solvents such as DMSO and methanol, which should be purged with an inert gas.

### Description

AGN 193109 is a potent antagonist of retinoic acid receptors (RARs;  $K_d = 2, 2, \text{ and } 3 \text{ nM}$  for RAR $\alpha$ ,  $\beta$ , and  $\gamma$ , respectively).<sup>1</sup> It is selective for RARs over retinoid X receptors (RXRs;  $K_d = >10,000 \text{ nM}$  for human RXR $\alpha$ ,  $\beta$ , and  $\gamma$  receptors). AGN 193109 reverses changes in cell morphology induced by the RAR agonist TTNPB (Item No. 16144) in ECE16-1 human endometrial ectocervical epithelial cells. It also reverses the growth suppressive effects of all-*trans*-RA, 13-*cis*-RA, and 9-*cis*-RA (Item No. 14587) when used at a 10-fold molar excess. AGN 193109 decreases expression of cytokeratin K5-8, 13, 14, 16, 17, and 19 genes, markers of retinoid action in ECE16-1 cells, when co-administered with TTNPB but not when used alone. *In vivo*, AGN 193109 induces cleft palate or frontonasal dysplasia and eye malformations in fetuses of pregnant mice following a single oral dose of 1 mg/kg.<sup>2</sup>

### References

1. Agarwal, C., Chandraratna, A.S., Johnson, A.L., *et al.* AGN193109 is a highly effective antagonist of retinoid action in human ectocervical epithelial cells. *J. Biol. Chem.* **271(21)**, 12209-12212 (1996).
2. Kochhar, D.M., Jiang, H., Penner, J.D., *et al.* The use of a retinoid receptor antagonist in a new model to study vitamin A-dependent developmental events. *Int. J. Dev. Biol.* **42(4)**, 601-608 (1998).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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