

Catalog # 10-1557 DiMNF

CAS# 14756-24-2

3',4'-Dimethoxy- α -naphthoflavone 2-(3,2-Dimethoxyphenyl)-4H-naphtho[1,2-b]pyran-4-one Lot # X106417

DiMNF is a selective aryl hydrocarbon receptor (AHR) modulator (SAhRM). It exhibits antiinflammatory activity including suppression of cytokine-mediated acute phase genes through dissociation of non-dioxin-response element (DRE) AHR activity from DRE-dependent xenobiotic gene expression¹. Represses the cytokine-mediated induction of CD55 and therefore may have therapeutic potential in regulating the immune response to tumor formation². Represses estrogen-inducible transcription³.

- 1) Murray et al. (2011), Suppression of cytokine-mediated complement factor gene expression through selective activation of the Ah receptor with 3',4'-dimethoxy-α-naphthoflavone; Mol. Pharmacol., **79** 508
- 2) Narayanan et al. (2012), Selective aryl hydrocarbon receptor modulator-mediated repression of CD55 expression induced by cytokine exposure; J. Pharmacol. Exp. Ther., **342** 345
- 3) Labrecque et al. (2012), Distinct roles for aryl hydrocarbon receptor nuclear translocator and ah receptor in estrogen-mediated signaling in human cancer cell lines; PLoS One, **7(1)** e29545

PHYSICAL DATA

Molecular Weight: 332.45 Molecular Formula: C₂₁H₁₆O₄

Purity: 99% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 1.5 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.