

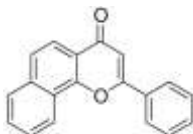
α -Naphthoflavone

ALTERNATE NAME: 2-phenyl-4H-naphtho[1,2-b]pyran-4-one, NSC 407011, 7,8-Benzoflavone

CATALOG #: 2918-5, -25

AMOUNT: 5 g, 25 g

STRUCTURE:



MOLECULAR FORMULA: C₁₉H₁₂O₂

FORMULA WEIGHT: 272.3

CAS NUMBER: 604-59-1

APPEARANCE: Crystalline Solid

SOLUBILITY: DMSO (~10 mg/ml) or DMF (~20 mg/ml), Ethanol (~1 mg/ml). Organic solvents should be purged with inert gas before solubilizing. Sparingly soluble in aqueous solvents. Prepare DMF stock solution and then dilute 1:4 with PBS (pH 7.2) for a final 0.1 mg/ml concentration. Do not store the diluted solution for >1 day.

PURITY: ≥98%

STORAGE: -20°C for 2 years

DESCRIPTION: α -Naphthoflavone modulates xenobiotic metabolism by antagonizing the aryl hydrocarbon receptor (AhR), blocking the expression of phase I and II genes at nanomolar concentrations. It can agonize AhR at higher concentrations (10 μ M). α -Naphthoflavone inhibits CYP19 (aromatase), CYP1A1, CYP1A2, and CYP1B1 (IC₅₀ = 500, 60, 6, and 5 nM,

respectively), whereas it activates CYP3A4 (K_d = 7.4 μ M). Dietary α -naphthoflavone can contribute to carcinogenesis in the presence of synthetic estrogens.

References:

Annu Rev Pharmacol Toxicol. 2003;43: 309-34.

J Pharmacol Exp Ther. 2011;338(1): 318–327.

J Biol Chem 1994; 269(29):19028-19033.

HANDLING: Protect from air, light and moisture. Do not take internally. Wear gloves and mask when handling since this product is toxic to the skin or eyes!

RELATED PRODUCTS:

Azamulin (Cat#2915)

Caffeic Acid (Cat#2006)

Itraconazole (Cat#1987)

Quercetin, Dihydrate (Cat#1773)

Quinidine Sulfate dihydrate (Cat#2910)

Resveratrol (Cat#1758)

Rosiglitazone (Cat#1559)

Thiabendazole (Cat#2161)

Cytochrome P450 3A4 (CYP3A4) Activity Assay Kit (Fluorometric) (Cat#K701)

Cytochrome P450 3A4 (CYP3A4) Inhibitor Screening Kit (Fluorometric) (Cat#K702)

Cytochrome P450 2C19 (CYP2C19) Activity Assay Kit (Fluorometric) (Cat#K848)

Cytochrome P450 2C19 Inhibitor Screening Kit (Fluorometric) (Cat#K849)

FOR RESEARCH USE ONLY! Not to be used on humans.