STRUCTURE:

Product: Apigenin

ALTERNATE NAME: 5,7-Dihydroxy-2-(4-hydroxyphenyl)-4*H*-1-benzopyran-4-one;

Chamomile; Flavone; NSC 83244; Versulin

CATALOG #: 2508-25, 100

AMOUNT: 25 mg, 100 mg

HC O

MOLECULAR FORMULA: C₁₅H₁₀O₅

MOLECULAR WEIGHT: 270.2

CAS No. 520-36-5

APPEARANCE: White solid

SOLUBILITY: DMSO (~25 mg/ml)

PURITY: >98% by HPLC

STORAGE: Store at -20°C. Protect from air and moisture

DESCRIPTION: A naturally occurring plant flavone that displays remarkable

anti-inflammatory, antioxidant and anti-carcinogenic properties. It selectively inhibits casein kinase II (CK2). Apigenin inhibits CK2 activity in the renal cortex with an IC $_{\!50}$ value of 30 μM to improve renal function in a rat model of glomerulonephritis. CK2 inhibition by 20 μM apigenin

decreases the degradation of I B and down-regulates NF- B levels in WEHI 231 cells. At 5 μ M, it is a potent inhibitor of the synthesis of the inflammatory mediators nitric oxide and prostaglandin E₂, reducing inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2) expression by 56% and 64%, respectively, in the macrophage cell line J774A.1.

REFERENCES: Patel, D., et al. (2007). Int. J. Oncol. **30**, 233-245.

HANDLING: Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

CaMKII antibody (Cat. No. 3883-100)

Phospho-CaMKII antibody (Cat. No. 3384-100)

Active CaMK1b (Cat. No. 7729-5)
Active CaMK1d (Cat. No. 7713-5)

Active CaMK1G (Cat. No. 7736-5)

Active CaMK4 (Cat. No. 7740-5)

CX4945 (Cat. No. 2459-5, 25)

K252a (Cat. No. 2013-500, 1000)

KN-93, water-soluble (Cat. No. 1909-1, 5)

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