

## **Certificate of Analysis**

Catalog Number	BP22530
Product Name	Luteolin

## **Physical and Chemical Properties**

CAS No.	491-70-3
Chemical Formula	C15H10O6
Molecular Weight	286.24
Solubility	DMSO: ≥ 100 mg/mL (349.36 mM)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	$HO \underset{HO}{\leftarrow} \underset{OH}{\leftarrow} \underset{OH}{\leftarrow} OH$

## **Product Information**

Description	Luteolin (Luteoline), a flavanoid compound, is a potent Nrf2 inhibitor. Luteolin has anti-inflammatory, anti-cancer properties, including the induction of apoptosis and cell cycle arrest, and the inhibition of metastasis and angiogenesis, in several cancer cell lines, including human non-small lung cancer cells.
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Targets&IC50	Human Endogenous Metabolite:
In vitro	Luteolin (0-160 $\mu$ M; 24 hours; NCI-H460 cells) treatment inhibits the viability of NCI-H460 cells in a concentration- dependent manner.Luteolin (20-80 $\mu$ M; 24 hours; NCI-H460 cells) treatment causes an accumulation of cells in the S phase.Luteolin (320-580 $\mu$ M; 48 hours; NCI-H460 cells) treatment induces apoptosis.Luteolin (20-80 $\mu$ M; 24 hours; NCI-H460 cells) treatment increases the protein expression levels of apoptotic regulatory proteins, including the Bax/Bcl-2 ratio, in a concentration-dependent manner, however, only 80 $\mu$ M Luteolin inhibits the expression of Bad. Luteolin also decreases the expression of Sirt1 in the NCI- H460 cell line in a concentration-dependent manner.
In vivo	Luteolin (10-100 mg/kg; oral gavage; daily; for 12 weeks; adult male Wistar rats) has an antioxidant effect and can also protect against non-alcoholic steatohepatitis through targeting the pro-inflammatory IL-1 and Il-18 pathways in rats with a high carbohydrate/high fat diet.
Analytical Data	

## **Analytical Data**

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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