

## **Data Sheet**

## **Product Information**

| Catalog Number   | BP22530                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name     | Luteolin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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<br>In solvent: -80°C for 1 year |
| Chemical Structure<br>OR<br>Tested Image | HO OH OH                                                  |

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