

# Produktinformation



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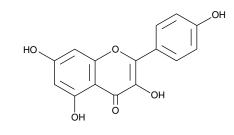
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# Product Information

### Kaempferol

Item No. 11852

CAS Registry No.: Formal Name:	520-18-3 3,5,7-trihydroxy-2-(4-hydroxyphenyl)-4H-1-
Synonyms:	benzopyran-4-one Nimbecetin, NSC 407289, NSC 656277, Pelargidenon, Rhamnolutein, Swartziol, Trifolitin
MF: FW:	$C_{15}H_{10}O_{6}$ 286.2
Purity:	≥98%
Stability:	≥2 years at -20°C
Supplied as:	A crystalline solid
UV/Vis.:	λ <sub>max</sub> : 204, 267, 368 nm



#### Laboratory Procedures

For long term storage, we suggest that kaempferol be stored as supplied at -20°C. It should be stable for at least two years. Kaempferol is supplied as a crystalline solid. A stock solution may be made by dissolving the kaempferol in the solvent of choice. Kaempferol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of kaempferol in these solvents is approximately 11, 10, and 3 mg/ml, respectively.

Kaempferol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, kaempferol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Kaempferol has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Kaempferol is a flavonoid which is abundant in a variety of plant leaves and fruits. It has diverse physiological activities through both direct and indirect effects.<sup>1,2</sup> For example, kaempferol directly binds estrogen receptors  $\alpha$  and  $\beta$ , acting as an inverse agonist or agonist.<sup>3,4</sup> It also acts as an antioxidant, which presumably contributes to its ability to suppress advanced glycation endproduct-induced NADPH oxidase, NF-κB signaling, and hypoxia-inducible factor-related angiogenesis and VEGF expression.<sup>5,6</sup> Kaempferol also suppresses signaling through certain receptor tyrosine kinases, including EGFR and HGF.<sup>2,7,8</sup>

#### References

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WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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