

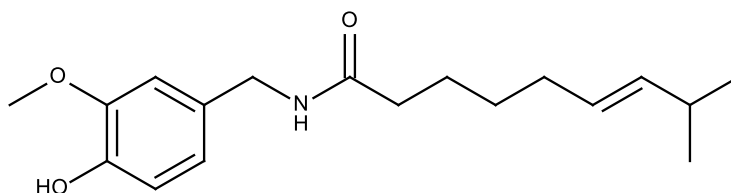
**Catalog # 10-2298**

**Capsaicin, natural**

CAS# 404-86-4

8-Methyl-N-vanillyl-*trans*-6-nonenamide

Lot # X102134



Capsaicin is a vanilloid agonist known to activate the transient receptor potential channel vanilloid subfamily member 1 (TRPV1)<sup>1,2</sup> and to possess analgesic<sup>3</sup>, anti-inflammatory<sup>4</sup> and hypolocomotor effects<sup>5</sup>.

- 1) Gunthorpe *et al.* (2002) *The diversity in the vanilloid (TRPV) receptor family of ion channels*. Trends Pharmacol. Sci. **23** 183
- 2) Van Der Stelt and Di Marzo (2004) *Endovanilloids. Putative endogenous ligands of transient receptor potential vanilloid 1 channels*. Eur. J. Biochem. **271** 1827
- 3) Perkins and Campbell (1992) *Capsazepine reversal of the antinociceptive action of capsaicin in vivo*. Br. J. Pharmacol. **107** 329
- 4) Kim *et al.* (2003) *Capsaicin exhibits anti-inflammatory property by inhibiting I $\kappa$ B- $\alpha$  degradation in LPS-stimulated peritoneal macrophages*. Cell. Signal., **15** 299
- 5) Di Marzo *et al.* (2001). *Hypolocomotor effects in rats of capsaicin and two long chain capsaicin homologues*. Eur. J. Pharmacol. ;**420** 123

**PHYSICAL DATA**

Molecular Weight:	305.41
Molecular Formula:	C <sub>18</sub> H <sub>27</sub> NO <sub>3</sub>
Purity:	>98% natural mixture of capsaicin and dihydrocapsaicin which is unresolvable by TLC (TLC: 5% MeOH/methylene chloride; R <sub>f</sub> = 0.33)
Solubility:	Ethanol (up to 25 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	SEVERE IRRITANT! HANDLE WITH CARE! Store as supplied at room temperature for up to one year from the date of purchase. Solutions in ethanol may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**