

# PRODUCT INFORMATION



## Mca-P-Cha-G-Nva-HA-Dap(Dnp)-NH<sub>2</sub> (trifluoroacetate salt)

Item No. 24702

**Formal Name:** 1-[2-(7-methoxy-2-oxo-2H-1-benzopyran-4-yl)acetyl]-L-prolyl-3-cyclohexyl-L-alanyl-glycyl-L-norvalyl-L-histidyl-L-alanyl-3-[(2,4-dinitrophenyl)amino]-L-alaninamide, trifluoroacetate salt

**Synonym:** Mca-Pro-Cha-Gly-Nva-His-Ala-Dap(DNP)-NH<sub>2</sub>

**MF:** C<sub>51</sub>H<sub>65</sub>N<sub>13</sub>O<sub>15</sub> • XCF<sub>3</sub>COOH

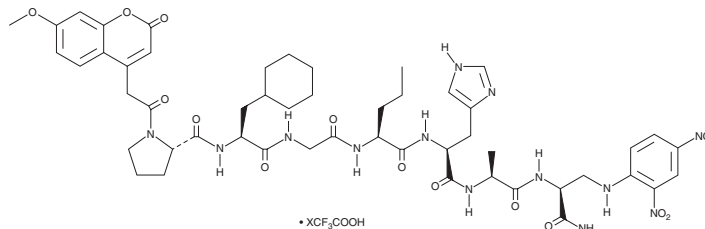
**FW:** 1,100.1

**Purity:** ≥95%

**Supplied as:** A lyophilized powder

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Mca-P-Cha-G-Nva-HA-Dap(Dnp)-NH<sub>2</sub> (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the Mca-P-Cha-G-Nva-HA-Dap(Dnp)-NH<sub>2</sub> (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Mca-P-Cha-G-Nva-HA-Dap(Dnp)-NH<sub>2</sub> (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

### Description

Mca-P-Cha-G-Nva-HA-Dap(Dnp)-NH<sub>2</sub> is a fluorogenic substrate for matrix metalloproteinase-1 (MMP-1), MMP-3, and MMP-26.<sup>1,2</sup> Upon cleavage by MMP-1, MMP-3, or MMP-26, 7-methoxycoumarin-4-acetyl (Mca) is released and its fluorescence can be used to quantify MMP activity. Mca displays excitation/emission maxima of 328/420 nm, respectively.

### References

1. Park, H.I., Turk, B.E., Gerkema, F.E., *et al.* Peptide substrate specificities and protein cleavage sites of human endometase/matrilysin-2/matrix metalloproteinase-26. *J. Biol. Chem.* **277(38)**, 35168-35175 (2002).
2. Knäuper, V., Patterson, M.L., Gomis-Rüth, F.X., *et al.* The role of exon 5 in fibroblast collagenase (MMP-1) substrate specificity and inhibitor selectivity. *Eur. J. Biochem.* **268(6)**, 1888-1896 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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