

# PRODUCT INFORMATION



## Mca-AVLQSGFR-K(Dnp)-K-NH<sub>2</sub> (trifluoroacetate salt)

Item No. 37002

**Formal Name:** N-[2-(7-methoxy-2-oxo-2H-1-benzopyran-4-yl)acetyl]-L-alanyl-L-valyl-L-leucyl-L-glutamyl-L-serylglycyl-L-phenylalanyl-L-arginyl-N<sup>6</sup>-(2,4-dinitrophenyl)-L-lysyl-L-lysineamide, trifluoroacetate salt

**MF:** C<sub>69</sub>H<sub>99</sub>N<sub>19</sub>O<sub>20</sub> • XCF<sub>3</sub>COOH

**FW:** 1,514.7

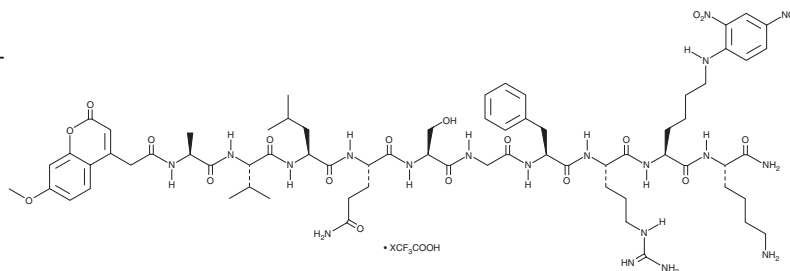
**Purity:** ≥98%

**Ex./Em. Max:** 328/420 nm

**Supplied as:** A solid

**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-AVLQSGFR-K(Dnp)-K-NH<sub>2</sub> (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Mca-AVLQSGFR-K(Dnp)-K-NH<sub>2</sub> (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Mca-AVLQSGFR-K(Dnp)-K-NH<sub>2</sub> (trifluoroacetate salt) is soluble in 20% acetonitrile and water.

### Description

Mca-AVLQSGFR-K(Dnp)-K-NH<sub>2</sub> is a fluorogenic substrate for severe acute respiratory syndrome coronavirus (SARS-CoV) main protease (M<sup>pro</sup>), also known as 3C-like protease (3CL<sup>pro</sup>).<sup>1</sup> Upon cleavage by SARS-CoV M<sup>pro</sup>, 7-methoxycoumarin-4-acetyl (Mca) is released and its fluorescence can be used to quantify SARS-CoV M<sup>pro</sup> activity. Mca displays excitation/emission maxima of 328/420 nm, respectively.

### Reference

1. Xue, X., Yang, H., Shen, W., *et al.* Production of authentic SARS-CoV M<sup>pro</sup> with enhanced activity: Application as a novel tag-cleavage endopeptidase for protein overproduction. *J. Mol. Biol.* **366**(3), 965-975 (2007).

#### 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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