

# PRODUCT INFORMATION



## Dnp-PLAYWAR (trifluoroacetate salt)

Item No. 24700

**Formal Name:** 1-(2,4-dinitrophenyl)-L-prolyl-L-leucyl-L-alanyl-L-tyrosyl-L-tryptophyl-L-alanyl-L-arginine, 2,2,2-trifluoroacetate

**Synonyms:** Dnp-Pro-Leu-Ala-Tyr-Trp-Ala-Arg-OH, Matrix Metalloproteinase-8/Matrix Metalloproteinase-26 Fluorogenic Substrate, MMP-8/MMP-26 Fluorogenic Substrate

**MF:** C<sub>49</sub>H<sub>63</sub>N<sub>13</sub>O<sub>13</sub> • XCF<sub>3</sub>COOH

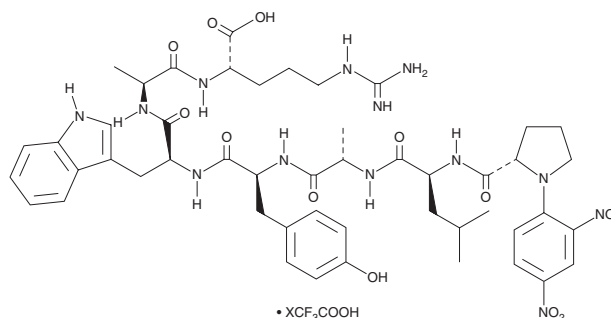
**FW:** 1,042.1

**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

Dnp-PLAYWAR (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the Dnp-PLAYWAR (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Dnp-PLAYWAR (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

### Description

Dnp-PLAYWAR is a fluorogenic substrate for matrix metalloproteinase-8 (MMP-8) and MMP-26.<sup>1,2</sup> The activity of MMP-8 and MMP-26 can be quantified by measuring tryptophan fluorescence that is unquenched upon peptide hydrolysis that removes the N-terminal dinitrophenol (Dnp) group.

### References

1. Netzel-Arnett, S., Mallya, S.K., Nagase, H., *et al.* Continuously recording fluorescent assays optimized for five human matrix metalloproteinases. *Anal. Biochem.* **195(1)**, 86-92 (1991).
2. Park, H.I., Turk, B.E., Gerkema, F.E., *et al.* Peptide substrate specificities and protein cleavage sites of human endometase/matrix metalloproteinase-26. *J. Biol. Chem.* **277(38)**, 35168-35175 (2002).

#### 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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