

Product Information Sheet

Product Name: 520 MMP FRET Substrate I

Sequence: QXLTM520-Pro-Leu-Gly-Leu-Trp-Ala-D-Arg-Lys(5-FAM)-NH₂¹⁻³

Catalog Number: AS-60568-01

MW: 1790.19

HPLC Purity: > 95%

Storage: The product is stable for 1 year at -20°C.

Features and Biological Applications:

This 5-FAM/QXLTM520-based FRET substrate is a sensitive and efficient reagent for assaying MMP activity. It can be cleaved by MMP-13.

This FRET peptide substrate incorporates QXLTM520, the best quencher available to pair with 5-FAM. When the peptide is intact, the fluorescence of 5-FAM (donor) is quenched by QXLTM520 ("dark" acceptor) through fluorescence resonance energy transfer (FRET). Upon cleavage by MMPs into two separate fragments, the fluorescence of 5-FAM is recovered and can be detected at the emission wavelength of 520±20 nm, with excitation wavelength of 490±20 nm.

Prepare 1 mM DMSO stock solution and dilute in an appropriate assay buffer at a concentration range of 1 to 100 μ M. The peptide concentration needs to be optimized depending on your experimental conditions.

References

- 1. Netzel-Arnett, S et al. Anal. Biochem. 195, 86 (1991).
- 2. Santala, A. et al. FEBS Lett. 461, 153 (1999).
- 3. Bickett, DM. et al., Anal. Biochem. 212, 58 (1993).

For in vitro research use only