

Product Information Sheet

Product Name: 520 MMP FRET Substrate XV

Sequence: QXLTM520 -γ-Abu-Pro-Gln-Gly-Leu-Dab(5-FAM)-Ala-Lys-NH₂¹

Catalog Number: AS-60582-01

MW: 1646.1

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-1, 2, 7, 8, 12, 13 and 14.

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. Beekman, B. et al., FEBS Lett. 390, 221 (1996).

For in vitro research use only