



Product Information Sheet

Product Name:	520 MMP FRET Substrate IV
Sequence:	5-FAM-Pro-Leu-Ala-Nva-Dap(QXL520 TM)-Ala-Arg-NH ₂ ¹⁻³
Catalog Number:	60571-01
MW:	1562.43
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, and 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 µM. The peptide concentration needs to be optimized depending on your experimental conditions.

References

1. d'Ortho, MP. et al., *Eur.J.Biochem.* 250, 751 (1997).
2. Knauper, V. et al., *J.Biol.Chem.* 271, 1544 (1996).
3. Murphy G., et al., *J.Biol.Chem.* 269, 6632 (1994).

For *in vitro* research use only