



## Product Information Sheet

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Product Name:	520 MMP FRET Substrate XIV
Sequence:	QXL520 <sup>TM</sup> - $\gamma$ -Abu-Pro-Cha-Abu-Smc-His-Ala-Dab(5-FAM)-Ala-Lys-NH <sub>2</sub> <sup>1</sup> (Smc=S-Methyl-L-cysteine)
Catalog Number:	60581-01
MW:	1913.0
HPLC Purity:	> 95%
Storage:	The product is stable for 1 year at -20°C.

### Features and Biological Applications:

This 5-FAM/QXL<sup>TM</sup>520-based FRET substrate is a sensitive and efficient reagent for assaying MMP activity. It can be cleaved by MMP-1, 2, 3, 7, 8, 9, 12, and 13.

This FRET peptide substrate incorporates QXL<sup>TM</sup>520, the best quencher available to pair with 5-FAM. When the peptide is intact, the fluorescence of 5-FAM (donor) is quenched by QXL<sup>TM</sup>520 ("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 $\pm$ 20 nm, with excitation wavelength of 490 $\pm$ 20 nm.

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

### References

1. Maggiora, LL., et al., *J.Med.Chem.* 35, 3727 (1992).

For *in vitro* research use only.