



ADAM SUBSTRATE

Fluorescent Substrate: MCA-LAQAPhe(homo)RSK(Dnp)-NH₂

Catalog Number: PEPMCA002

Use: This fluorescent peptide substrate can be used to assess activity of enzymes in the ADAM and MMP family. It is the MCA/Dnp version of PEPDAB005. Typically, the peptide is dissolved in DMSO to make a stock solution of about 10mM concentration. When used for in vitro assays, the substrate is often used at about 10 μ M concentration. For use with ADAM10 and 17, the buffer should consist of 25mM Tris, pH 8, and 6 x 10⁻⁴ Brij detergent. If human ADAM8 or ADAM12 are used, add enough CaCl₂ to the aforementioned buffer to achieve a concentration of 10mM. For use with the MMPs, the buffer should contain 50 mM Tris, pH 7.5, 150 mM NaCl, 2 mM CaCl₂, 5 μ M ZnSO₄, and 0.01% Brij-35. Excitation and emission wavelengths are 325 and 393 nm respectively.

Purity: Greater than 92% as assessed by HPLC and Mass Spectrometry.

Solubility: 1 mg/ml in water with 10% Formic acid

Appearance: Yellow lyophilized powder

Shipping: The peptide powder is shipped at room temperature.

Storage: Upon receiving, the peptide should be stored at -70 °C. Avoid repeated freeze-thaw cycles. If dissolved in liquid (such as DMSO), aliquot into separate tubes to minimize the number of freeze-thaw cycles.

Stability: Samples are stable up to 6 months at -70°C.

Reference: [Fluorescent substrates for the proteinases ADAM17, ADAM10, ADAM8, and ADAM12 useful for high-throughput inhibitor screening.](#) Moss, M.L. and Rasmussen, F.H. (2007) Analytical Biochemistry;366(2):144-8.