



ADAM SUBSTRATE

Fluorescent Substrate: Dabcyl-LAQAPhe(homo)RSK(5FAM)-NH₂

Catalog Number: PEPDAB005

Use: This fluorescent peptide substrate can be used to assess activity of enzymes in the ADAM family. It demonstrates reasonably strong activity against all of those enzymes, with specificity constants, k_{cat}/K_m ($M^{-1}s^{-1}$), ranging from approximately 4×10^3 to 4×10^5 . 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 6×10^{-4} Brij detergent. If human ADAM8 or ADAM12 are used, add enough CaCl₂ to the aforementioned buffer to achieve a concentration of 10mM. Excitation and emission wavelengths are 485 and 530 nm respectively.

Molecular Weight: 1542.5 g/mol

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

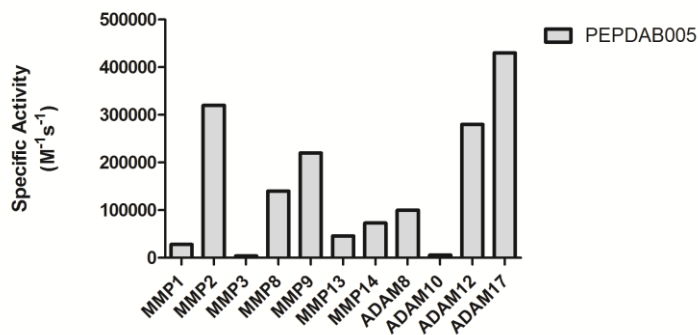
Solubility: 1 mg/ml in water with 10% Formic acid

Appearance: Red 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.