



ADAM8 SUBSTRATE

Fluorescent Substrate: Dabcyl-HGDQMAQKSK(5FAM)-NH₂

Catalog Number: PEPDAB013

Use: This fluorescent peptide substrate is used primarily to assess activity of ADAM8. It provides good selectivity since it is not processed at all by the seven other MMPs and ADAMs tested. Its specificity constant, k_{cat}/K_m ($M^{-1}s^{-1}$), is 5.3×10^4 against ADAM8, and 2.4×10^3 , 2.7×10^2 , and 4.0×10^1 against MMP2, ADAM10, and ADAM12 respectively. 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 ADAM8, the buffer should consist of 25mM Tris, pH 8, 100mM NaCl, 1×10^{-3} Brij detergent, and 10mM CaCl₂.

Molecular Weight: 1737.7 g/mol

Purity: Greater than 94% as assessed by HPLC and Mass Spectrometry.

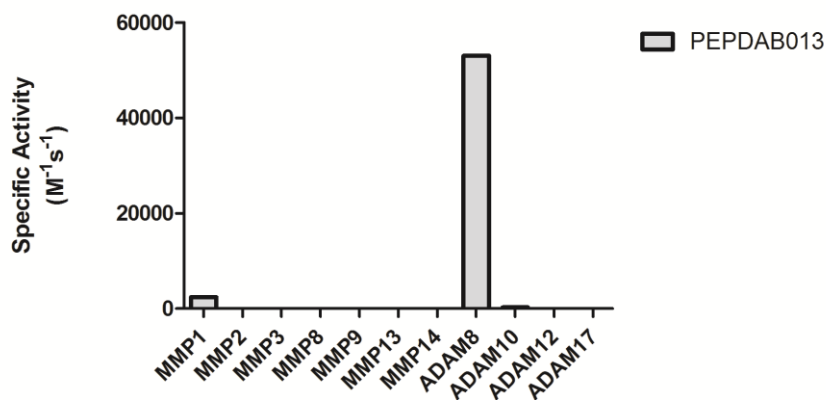
Solubility: 1 mg/ml in water

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.



References: [Fluorescent substrates for the proteinases ADAM17, ADAM10, ADAM8, and ADAM12 useful for high-throughput inhibitor screening.](#) Moss ML, Rasmussen FH. Anal Biochem. 2007 Jul 15;366(2):144-8.

[Proteolytic Activity Matrix Analysis \(PrAMA\) for Simultaneous Determination of Multiple Protease Activities.](#) Miller MA, et al. Integr Biol (Camb). 2011 Apr; 3(4): 422–438. doi: 10.1039/c0ib00083c