

ADAM SUBSTRATE II

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

Catalog Number: PEPDAB010

Use: This fluorescent peptide substrate is based on the cleavage sequence in

precursor TNF alpha and can be used to assess activity of enzymes in the ADAM family. It demonstrates reasonably strong activity against ADAM17, ADAM9, and ADAM10. 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 $10\mu M$ concentration.For use with ADAM10, 9 and 17, the buffer should consist of 25mM Tris, pH 8, and 6 x 10^{-4} Brij detergent. Excitation and

emission wavelengths are 485 and 530 nm respectively.

Molecular Weight: 1751.9 g/mol

Purity: Greater than 93% as assessed by HPLC and Mass Spectrometry.

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

Appearance: Red lyophilized powder

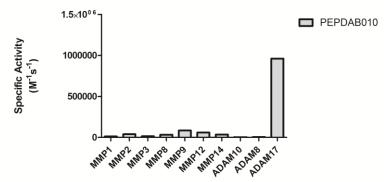
Shipping: The peptide powder is shipped at room temperature.

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.



References: Fluorescent substrates useful as high-throughput screening tools for ADAM9.

Moss ML, Rasmussen FH, Nudelman R, Dempsey PJ, Williams J. Comb Chem High Throughput Screen. 2010 May;13(4):358-65.

High-throughput protease activity cytometry reveals dose-dependent heterogeneity in PMA-mediated ADAM17 activation. Wu L, et al. Integr Biol (Camb). 2015 May;7(5):513-24. doi: 10.1039/c5ib00019j. Epub 2015 Apr 2.