



## **SPECIFICATIONS AND USE**

### **Fluorescent Substrate: MCA-PRYEAYKMGK(DNP)-NH<sub>2</sub>**

**Catalog Number:** PEPMCA001

**Use:** This fluorescent peptide substrate is used primarily to assess activity of ADAM10 and is a selective substrate for ADAM10. The substrate is based on the TENTide sequence discussed in the reference below. Typically, the peptide is dissolved in DMSO to make a stock solution of about 2mM concentration. When used for in vitro assays, the substrate is often used at about 2 $\mu$ M concentration. For use with ADAM10, the buffer should consist of 25mM Tris, pH 8, 100mM NaCl, 6 x 10<sup>-4</sup> Brij detergent, and 10mM CaCl<sub>2</sub>. Excitation and emission wavelengths are 325 and 393 nm respectively.

**Molecular Weight:** 1623.8 g/mol

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

**Solubility:** 1 mg/ml in water with 30% ACN

**Appearance:** Yellow lyophilized powder

**Counter Ion:** Trifluoroacetate

**Shipping:** The peptide powder is shipped at room temperature.

**Storage:** Upon receiving, the peptide should be stored at -20 °C or lower. 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 -20°C.

**Specificity:** The substrate is specific for ADAM10

**References:** [Active site determinants of substrate recognition by the metalloproteinases TACE and ADAM10](#). Cristina I. Caescu, Grace R. Jeschke, and Benjamin E. Turk, *Biochemical Journal*, (2009), 424(1), 79-88.