Cathepsin D & E substrate (fluorogenic)

Synthetic substrate useful for inhibitor screening and kinetic analysis

Quenched fluorogenic substrate for cathepsin D (k_{cat}/K_m=1.09 x 10 $M^{-1}s^{-1}$) and cathepsin E (k_{cat}/K_m=1.56 x 10 $M^{-1}s^{-1}$). Mca fluorescence is quenched by the Dnp group until cleavage separates them. Activity of the two enzymes on this substrate can be distinguished by the use of *Ascaris* pepsin inhibitor, which inhibits cathepsin E, but not cathepsin D. This substrate is also cleaved by MMP-2, MMP-3, MMP-9, but not MMP-1 nor MMP-13. This substrate is useful for inhibitor screening and kinetic analysis. Ex.: 320-340 nm, Em.: 393-420 nm. Mca-Pro-Leu-OH (BML-P127) can be used to calibrate for Mca fluorescence.

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BML-P145-0001	1mg

Manuals, SDS & CofA View Online »

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Handling	Protect from light. Keep cool and dry.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Appearance	Yellow powder
Formulation	Trifluroacetate salt
MW	1756.0
Purity	≥95% (HPLC)
Quality Control	Determined by MS.
Sequence	Mca-Gly-Lys-Pro-Ile-Leu-Phe-Phe-Arg-Leu-Lys(Dnp)-D-Arg-NH_2 [Mca= (7-methoxycoumarin-4-yl)acetyl; Dnp=dinitrophenyl]
Solubility	Soluble in DMSO (1mM) or 50% acetonitrile (10mg/ml).
Source	Synthetic

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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