

Description	Cat.#	Qty
Peroxynitrite	Q87910	1 ml
PROLI NONOate	Q87960	10 mg
N.omega.-propyl-L-Arginine	Q87730	5 mg
SE 175	S03710	5 mg
L-Septapterin	Q87930	1 mg
SIN-1 Chloride	626331	5 mg
SNAP	716464	5 mg
S-Nitroso-L-glutathione	679812	5 mg
Spermine NONOate	280960	10 mg
Sulpho NONOate	Q88000	10 mg
Tetrahydro-L-biopterin (dihydrochloride)	431472	5 mg
L-Thiocitrulline (dihydrochloride)	Q87710	10 mg
S-Methyl-L-Thiocitrulline (dihydrochloride)	Q87720	5 mg
TRIM	403781	50 mg
V-PYRRO/NO	Q87970	5 mg
YC 1	Q87900	1 mg

Technical tip

Proteases are important enzymes able to cleave proteins on more or less specific sites. Several proteases categories have been defined from the fact they contain a specific amino-acid in their active site, i.e. cysteine. Proteases from lysosomes are involved in the degradation of endocytosed proteins. Others metabolized biomolecules or participate in the (in) activation of factors in several metabolic pathways, i.e. cleavage of cell signaling proteins, cytokines, prohormones, coagulation enzymes, or metalloproteins.

Fluorescent enzyme substrates and quenching derivatives are thus reagents used to develop sensitive and specific assays for many important metabolic reactions.

Enzymes Probes

Interchim offer a comprehensive list of highest quality chromogenic, fluorogenic and bioluminescent enzyme substrates. These substrates are useful tools in the studies of molecular biology (detection of reporter gene expression), microbiology (food, clinical and environmental) and immunology (ELISA testings).

Caspases Probes

D2-Rhodamine110

MW : 788.57

$\lambda_{exc.}/\lambda_{em.}$ (cleaved) : 499/521 nm

General caspase probe (incl.caspase 3 and 7)

Description	Cat.#	Qty
D2-Rhodamine110	FP-R1378A	1 mg

Z-DEVD-AMC

MW : 765.75

$\lambda_{exc.}/\lambda_{em.}$ (substrate) : 330/390 nm (cleaved) : 342/441

Caspase 3 probe

Description	Cat.#	Qty
Z-DEVD-AMC	FP-AM355A	5 mg

Z-DEVD-AFC

MW : 821.72

$\lambda_{exc.}/\lambda_{em.}$ (substrate) : 339/435 nm (cleaved) : 380/500 nm

Caspase 3 probe

Description	Cat.#	Qty
Z-DEVD-AFC	FP-R1147A	5 mg

Z-DEVD-Rhodamine110

MW : 1515.47

$\lambda_{exc.}/\lambda_{em.}$ (cleaved) : 499/521 nm

Caspase3 probe

Description	Cat.#	Qty
Z-DEVD-Rhodamine110	FP-99481A	5 mg

AC-DEVD-R110-PEG

MW : 1050.14

$\lambda_{exc.}/\lambda_{em.}$ (end product) : 496/520 nm

Caspase3 probe

Description	Cat.#	Qty
AC-DEVD-R110-PEG	FP-BP6490	1 mg

Z-IETD-AMC

MW : 767.8

$\lambda_{exc.}/\lambda_{em.}$ (substrate) : 330/390 nm (cleaved) : 342/441 nm

Caspase 8 probe (early stage of apoptosis)

Description	Cat.#	Qty
Z-IETD-AMC	FP-T8235A	5 mg

Z-IETD-AFC

MW : 821.77

$\lambda_{exc.}/\lambda_{em.}$ (substrate) : 340/434 nm, (cleaved) : 380/500 nm

Caspase 8 probe

Description	Cat.#	Qty
Z-IETD-AFC	FP-T8236A	5 mg

Z-IETD-Rhodamine110

MW : 1515.56

$\lambda_{exc.}/\lambda_{em.}$ (cleaved) : 499/521 nm

Caspase 8 probe

Description	Cat.#	Qty
Z-IETD-Rhodamine110	FP-S2290A	2 mg

Ac-LEHD-AMC

MW : 711.81

$\lambda_{exc.}/\lambda_{em.}$ (substrate) : 330/390 nm (end product) : 342/441 nm

Caspases 9 and 6 probe

Description	Cat.#	Qty
Ac-LEHD-AMC	FP-BP4320	5 mg

AC-LEHD-R110

MW : 1495.62

$\lambda_{exc.}/\lambda_{em.}$ (end product) : 496/520 nm

substrate for caspases 9 and 6 probe

Description	Cat.#	Qty
AC-LEHD-R110	FP-BP6450	5 mg

AC-LEED-R110

MW : 1479.57

$\lambda_{exc.}/\lambda_{em.}$ (end product) : 496/520 nm

Caspase 13 probe

Description	Cat.#	Qty
AC-LEED-R110	FP-BP6430	5 mg

AC-VDVAD-R110

MW : 1505.65

$\lambda_{exc.}/\lambda_{em.}$ (end product) : 496/520 nm

Caspase 2 probe

Description	Cat.#	Qty
AC-VDVAD-R110	FP-BP6470	5 mg

Technical tip

Caspases probes

Caspases are cysteine aspartate proteases involved in cell signaling notably in inflammation (caspase 1) and in apoptosis (programmed cell death)(caspases 3, 6-10). An initial caspase is activated by TNF related fas-fas Ligand, through cytochrome c or JNK/c-jun pathway, then activates other caspases in cascades, and lastly cleaves cellular proteins in cytosol and nuclear lamin. Caspases play also a role in mitochondria. As a result, cell ability to activate or inhibit these complex cascades of caspases is critical in many physiological phenomena and diseases including Parkinson.



Caspase activation pathways in apoptosis.

See also CaspaLux probes and kits page E161 cell assays kits/Apoptosis

Serine/Cystein... proteases probes

BZAR

MW : 983.91

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Serine proteases substrate and an inhibitor for guanidinobenzoate. It is 50 to 100 times more sensitive than the AMC-based substrate

Description	Cat.#	Qty
BZAR	FP-63422A	5 mg

BZIPAR

MW : 1404.5

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Trypsin substrate. It has been reported to enter live cells to be hydrolyzed by lysosomal proteases.

Description	Cat.#	Qty
BZIPAR	FP-M1378A	5 mg

Z-FR-AMC

MW : 649.14

$\lambda_{exc.}/\lambda_{em.}$: (substrate) : 330/390 nm(end product) : 342/441 nm

Serine proteases substrate, including cathepsins, kallikrein and plasmin.

Description	Cat.#	Qty
Z-FR-AMC	FP-AM356A	25 mg

Z-FR-R110

MW : 1278.26

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Cysteine proteases cathepsins B and L substrate. Used in flow cytometry studies of human monocytes and rat macrophages.

Description	Cat.#	Qty
Z-FR-R110	FP-83622A	5 mg

Others proteases probes

Z-AA-R110-PEG

MW : 824.87

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Elastase substrate

Description	Cat.#	Qty
Z-AA-R110-PEG	FP-BP6510	1 mg

Z-AAD-R110

MW : 1113.1

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Granzyme B substrate. Granzyme B from T lymphocytes and natural killer cells induces apoptosis in target cells by activating caspases and causing mitochondrial cytochrome C release

Description	Cat.#	Qty
Z-AAD-R110	FP-BP6420	5 mg

AP-R110-PEG

MW : 716.78

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Prolyl endopeptidase substrate (CD26).

Description	Cat.#	Qty
AP-R110-PEG	FP-BP6500	1 mg

See also inhibitors for proteases (biochemistry), and haematology enzymes (cell assays/Haematology).

See also Grantoxilux kit

R110-PEG

MW : 548.22

$\lambda_{exc.}/\lambda_{em.}$: (end product) : 496/520 nm

Can be used as a reference standard for peptidase substrates based on the dye

Description	Cat.#	Qty
R110-PEG	FP-BP6200	5 mg

Aspartyl Proteinase Substrate-D/E

[DABCYL-Glu-Arg-Nle-Phe-Leu-Ser-Phe-Pro-EDANS]

MW : 1507.5

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

A useful fluorogenic substrate for the continuous assay of malaria **aspartyl proteinase**.

Description	Cat.#	Qty
Aspartyl Proteinase Substrate-D/E	FP-AY7971	250 µg

CMV protease Substrate D/E

[DABCYL-Arg-Gly-Val-Val-Asn-Ala-Ser-Ser-Arg-Leu-Ala-EDANS]

MW : 1628.6

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

Human **CMV protease** efficiently cleaves this synthetic substrate allowing continuous assays with peptide concentrations lower than 10 µM.

Description	Cat.#	Qty
CMV protease Substrate D/E	FP-AY7991	1 mg

HCV Protease-D/E

Ac-Asp-Glu-Asp(EDANS)-Glu-Glu-Abu-[COO]Ala-Ser-Lys(DABCYL)-NH₂

MW : 1548.60

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

Enables detection of nonstructural protein 3 (NS3 protease) subnanomolar concentrations, with linearity between 1 nM and 250 pM.

Description	Cat.#	Qty
HCV Protease-D/E	FP-AN7481	250 µg

HIV Protease Substrate I-D/E

[DABCYL-GABA-Ser-Gln-Asn-Tyr-Pro-Ile-Val-Gln-EDANS]

MW : 1532.5

$\lambda_{exc.}/\lambda_{em.}$: 355/~500 nm

This substrate is derived from a natural processing site for HIV-1 PR, and widely used for the continuous **HIV protease** activity assay, and to screen TNF-converterase inhibitors.

Description	Cat.#	Qty
HIV Protease Substrate I-D/E	FP-AY7961	1 mg

TACE Substrate-D/E

[DABCYL-Leu-Ala-Gln-Ala-Val-Arg-Ser-Ser-Ser-Arg-EDANS]

MW : 1573.6

$\lambda_{exc.}/\lambda_{em.}$: 355/~500 nm

Derived from the cleavage sequence of pro-TNFb Recognized by **TNFa-cleaving enzyme (TACE)**.

Description	Cat.#	Qty
TACE Substrate-D/E	FP-AY7981	1 mg

Renin Substrate D/E

[DABCYL-GABA-Ile-His-Pro-Phe-His-Leu-Val-Ile-His-Thr-EDANS]

MW : 1797.9

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

Cleavage of the substrate occurs specifically on the Leu-Val bond and corresponds to the renin cleavage site of angiotensinogen. It is used for renin detection and renin activity assays.

Description	Cat.#	Qty
Renin Substrate D/E	FP-AY7921	1 mg

See also Amyloid stains page Dxx/section J Neurology.

Technical tip

Matrix MetalloProteinases (MMP) (collagenases, gelatinases...)

Matrix MetalloProteinases (MMPs) are a family of zinc metalloendopeptidases secreted by cells, and are responsible for much of the turnover of matrix components. As other metallopeptidases, they contain the HEXXHXXGXXH motif as the zinc-binding active site. MMPs from vertebrate species include at least 26 members. MMP are activated by cytokines and inhibited by TIMP, but also activate cytokines (IL-1 α) and releases TGF- β 1.

MMP are involved in normal and pathologic tissue remodeling and cell migration. Applications include cancerology, dermatology and skin diseases, inflammation, menstrual cycle, arthritis, as well as some hereditary diseases (nephritis, muscular dystrophy...).

β -amyloid peptide-D/E

[DABCYL-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Glu-EDANS]

MW : 1983.00

$\lambda_{exc}/\lambda_{em}$: ~355/~500 nm

This substrate has a minimum sequence for Abeta aggregate formation. **b-amyloid peptides** (Abeta) are the main proteic components of neuritic plates and are important in the Alzheimer's disease pathogenesis. It is reported that Abeta itself is non toxic ; however, it becomes toxic against neuronal cells once it has aggregated into amyloid fibrils by peptide-peptide interactions.

Description	Cat.#	Qty
β -amyloid peptide-D/E	FP-AY7941	250 μ g

β -amyloid peptide-D/E

DABCYL-Lys-Thr-Glu-Glu-Ile-Ser-Glu-Val-Asn-Leu-Asp-Ala-Glu-Phe-EDANS

MW : 2124.30

$\lambda_{exc}/\lambda_{em}$: ~355/~500 nm

A FRET-based fluorescent probe for β -amyloid research

Description	Cat.#	Qty
β -amyloid peptide-D/E	FP-AY7951	250 μ g

Matrix MetalloProteinases (MMP) probes

MMP substrateMCA/DPA

Pro-Leu-Gly-Leu-Dpa-Ala-Arg-OH

MW : 1094.2

$\lambda_{exc}/\lambda_{em}$: 325/393 nm

A generic fluorogenic substrate for MMPs assays. See more sensitive MMP 2/7 substrate FP-AN977.

Description	Cat.#	Qty
MMP substrateMCA/DPA	FP-AY7571	1 mg

MMP Substrate-DNP

[DNP-Pro-Leu-Gly-Leu-Trp-Ala-D-Arg-NH₂

A generic MMP substrate using Trp fluorescence quenching. It is prepared as a substrate for fibroblast collagenase.

Description	Cat.#	Qty
MMP Substrate-DNP	FP-AY7561	1 mg

MMP-1 Substrate I-DNP

[DNP-Pro-Leu-Ala-Leu-Trp-Ala-Arg-OH]

MW : 992.11

$\lambda_{exc}/\lambda_{em}$: 280/360 nm

A synthetic collagenase substrate. It is digested by MMP-1 to release the intramolecular quenched fluorescence.

Description	Cat.#	Qty
MMP-1 Substrate I-DNP	FP-AY5761	1 mg

MMP-1 Substrate II-DNP

DNP-Pro-Leu-Gly-Cys(Me)-His-Ala-D-Arg-NH₂

MW : 932.04

$\lambda_{exc}/\lambda_{em}$: 280/360 nm

Possesses a kcat/Km 10-fold higher than FP- AY7561. HPLC or massspectroscopy is required for the MMPs enzyme analysis.

Description	Cat.#	Qty
MMP-1 Substrate II-DNP	FP-AY7591	1 mg

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MMP-1 Substrate III-DNP

MW : 1105.29

$\lambda_{exc.}/\lambda_{em.}$: 365/450 nm

Compared with the parent substrate, demonstrates a 36-fold improvement in turnover (kcat/Km) by interstitial collagenase (MMP-1). This substrate is widely used for the continuous analysis of MMPs.

Description	Cat.#	Qty
MMP-1 Substrate III-DNP	FP-AY7601	1 mg

MMP-2 Substrate-MCA

[MCA-Pro-Leu-Ala-Nva-Dpa-Ala-Arg-NH2]

MW : 1093.17

$\lambda_{exc.}/\lambda_{em.}$: 325/393 nm

A MMP-2 fluorogenic substrate.

Description	Cat.#	Qty
MMP-2 Substrate-MCA	FP-AY7671	1 mg

MMP-1/MMP-9 Substrate-DNP

[DNP-Pro-Cha-Gly-Cys(Me)-His-Ala-Lys[Abz(NMe)]-NH2]

MW : 1077.24

$\lambda_{exc.}/\lambda_{em.}$: 365/450 nm

A MMP-1 and MMP-9 substrate. It is used combined with HPLC or mass spectroscopic analysis of MMP-1 and MMP-9.

Description	Cat.#	Qty
MMP-1/MMP-9 Substrate-DNP	FP-AY7611	1 mg

MMP-2/MMP-7 Substrate-MCA

[MCA-Pro-Leu-Gly-Leu-Dpa-Ala-Arg-NH2]

MW : 1093.17

$\lambda_{exc.}/\lambda_{em.}$: 325/393 nm

The punctuated metalloproteinase (PUMP, EC 3.4.24.23) cleaves the substrate at the Gly-Leu bond with a 190-fold increase in fluorescence. In the human matrix metalloproteinases assays, FP-AN9770 is about 50 to 100 times more sensitive than the substrate FP-AY756).

MMP-2/MMP-7 Substrate-MCA	FP-AN9770	1 mg
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MMP-2/MMP-9 Substrate I-DNP

[DNP-Pro-Leu-Gly-Met-Trp-Ser-Arg-OH]

MW : 1012.12

$\lambda_{exc.}/\lambda_{em.}$: 280/360 nm

optimized for both 72-kDa fibroblast gelatinase and 92 kDa neutrophil gelatinase.

Description	Cat.#	Qty
MMP-2/MMP-9 Substrate I-DNP	FP-AY7751	1 mg

MMP-2/MMP-9 Substrate II

[Ac-Pro-Leu-Gly-Mmp-Leu-Gly-OC2H5]

MW : 655.86

An exceptional substrate, used for continuous MMP-2 (gelatinase A), and MMP-9 (gelatinase B) spectrophotometric assay in combination with a colour-developing thiol-reactive agent.

Description	Cat.#	Qty
MMP-2/MMP-9 Substrate II	FP-AY7761	1 mg

MMP-3 Substrate I-DNP

[2,4-dinitrophenyl -Pro-Tyr-Ala-Tyr-Trp-Met-Arg-OH]

MW : 1152.26

$\lambda_{exc.}/\lambda_{em.}$: 280/360 nm

The substrate hydrolysis rate rivals or exceeds those of the corresponding natural protein substrates or other synthetic peptides.

Description	Cat.#	Qty
MMP-3 Substrate I-DNP	FP-AY7771	1 mg

MMP-3 Substrate II-NBD

MW : 1598.6

$\lambda_{exc.}/\lambda_{em.}$: 350/465 nm

An excellent MMP-3 FRET substrate (Stromelysin ; $k_{cat}/K_m = 2.14 \times 10^4 \text{ M}^{-1}\text{s}^{-1}$), used for analysis of stromelysin inhibitors.

Description	Cat.#	Qty
MMP-3 Substrate II-NBD	FP-AY7781	1 mg

MMP-7 Substrate I-DNP

[2,4-Dinitrophenyl)-Arg-Pro-Leu-Ala-Leu-Trp-Arg-Ser-OH]

MW : 1164.3

$\lambda_{exc.}/\lambda_{em.}$: 280/360 nm

An excellent fluorogenic substrate for MMP-7, with K_m and k_{cat} values of 26 μM and 5.0 s^{-1} , respectively. ($k_{cat}/K_m = 1.9 \times 10^5 \text{ M}^{-1}\text{s}^{-1}$).

Description	Cat.#	Qty
MMP-7 Substrate I-DNP	FP-AY7801	1 mg

MMP-7 Substrate II-D/E

[DABCYL-Arg-Pro-Leu-Ala-Leu-Trp-Arg-Ser-EDANS]

MW : 1497.5

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

Optimized peptide sequence for MMP-7. Has been used for high throughput screening of MMP-7 inhibitors.

Description	Cat.#	Qty
MMP-7 Substrate II-D/E	FP-AY7851	1 mg

MMP-8 Substrate-DNP

[2,4-dinitrophenyl-Pro-Leu-Ala-Tyr-Trp-Ala-Arg-OH]

MW : 1042.13

$\lambda_{exc.}/\lambda_{em.}$: 280/~360 nm

The Trp fluorescence is quenched by the dinitrophenol (DNP) group on the N-terminus.

Description	Cat.#	Qty
MMP-8 Substrate-DNP	FP-AY7861	1 mg

MMP-13 Substrate-MCA

[MCA-Pro-Cha-Gly-Nva-His-Ala-Dpa-NH₂]

MW : 1100.16

$\lambda_{exc.}/\lambda_{em.}$: 325/393 nm

Readily hydrolyzed by collagenase-3 (MMP-13). The hydrolysis is inhibited in a 1 : 1 stoichiometric fashion by the tissue inhibitors of metalloproteinases, TIMP-1, TIMP-2, and TIMP-3.

Description	Cat.#	Qty
MMP-13 Substrate-MCA	FP-AY7871	1 mg

NFF-2-MCA

[MCA-Arg-Pro-Lys-Pro-Tyr-Ala-Nva-Trp-Met-Lys(2,4-dinitrophenyl)-NH₂]

MW : 1656.90

$\lambda_{exc.}/\lambda_{em.}$: 325/393 nm

NFF-2 is hydrolyzed 60 times more rapidly by MMP-3 ($k_{cat}/K_m = 59,400 \text{ M}^{-1}\text{s}^{-1}$) than MMP-1. However NFF-2 has little discrimination between MMP-3, MMP-2 ($k_{cat}/K_m = 54,000 \text{ M}^{-1}\text{s}^{-1}$), and MMP-9 ($k_{cat}/K_m = 55,300 \text{ M}^{-1}\text{s}^{-1}$).

Description	Cat.#	Qty
NFF-2-MCA	FP-AY7881	1 mg

NFF-3

[MCA-Arg-Pro-Lys-Pro-Val-Glu-Nva-Trp-Arg-Lys(2,4-dinitrophenyl)-NH₂]

MW : 1675.88

$\lambda_{exc.}/\lambda_{em.}$: 325/393 nm

NFF-3 is hydrolyzed rapidly by MMP-3 (kcat/Km = 218,000 M⁻¹s⁻¹) and very slowly by MMP-9 (kcat/Km = 10,100 M⁻¹s⁻¹), but there was no significant hydrolysis by MMP-1 and MMP-2. Important application for the discrimination of MMP-3 activity from that of other MMPs.

Description	Cat.#	Qty
NFF-3	FP-AY7891	1 mg

TNO113

[DABCYL-GABA-Pro-Cha-Abu-Smc-His-Ala-Glu(EDANS)-Ala-Lys-NH₂]

MW : 1588.9

$\lambda_{exc.}/\lambda_{em.}$: ~355/~500 nm

A fluorogenic MMP substrate that is used for the continuous assay of MMP activities.

Description	Cat.#	Qty
TNO113	FP-AY7901	1 mg

TNO211

[DABCYL-GABA-Pro-Gln-Gly-Leu-Glu(EDANS)-Ala-Lys-NH₂]

MW : 1326.5

$\lambda_{exc.}/\lambda_{em.}$: ~340/~485 nm

TNO211 is a highly soluble fluorogenic MMP substrate. TNO211 can detect MMP activity with high sensitivity in culture medium.

Description	Cat.#	Qty
TNO211	FP-AY7911	1 mg

DNP = 2,4-dinitrophenyl
 Dpa = 3-(2,4-dinitrophenyl)-L-2,3-diamino propionyl
 Abz = 2-aminobenzoyl
 Cha = α -cyclohexylalanyl
 Mmp = 2-mercapto-4-methylpentanoyl
 DMC = 7-Dimethylaminocoumarin-4-yl
 GABA = aminobutyric acid
 Smc = S-methyl- L-cysteine

More information on our MMP dyes and References on inquire.

Transglutaminases probes

Dansyl Cadaverine

MW : 335.47

$\lambda_{exc.}/\lambda_{em.}$: 333/518 nm

Description	Cat.#	Qty
Dansyl Cadaverine	FP-75581A	100 mg

FITC Cadaverine

MW : 653.4

$\lambda_{exc.}/\lambda_{em.}$ (pH>7.0) : 492/516 nm

Description	Cat.#	Qty
FITC Cadaverine	FP-46576A	5 mg

FAM-Cadaverine

MW : 460.48

Description	Cat.#	Qty
FAM-Cadaverine	FP-AM846A	10 mg

FAM-Lysine

MW : 540.48

Description	Cat.#	Qty
FAM-Lysine	FP-AM847A	10 mg

TMR-Cadaverine

MW : 514.62

Description	Cat.#	Qty
TMR-Cadaverine	FP-60053A	10 mg

Technical tip

Transglutaminase enzymes are localized in tissue (ITG) and keratinocytes (TKG). They participate at early regulating events priming apoptosis and also lately through the formation of intracellular crosslinked protein polymers. They are notably involved in neurodegenerative disorders (Huntington, Alzheimer, Parkinson), celiac disease, and dermatology (hyperkeratosis). Fluorescent transglutaminase substrates are used to label proteins by transamination. Has also been used to prepare other small fluorescent biomolecules via amidation or reductive amination.

TMR-Lysine

MW : 558.62

Description	Cat.#	Qty
TMR-Lysine	FP-AM873A	5 mg

SR101-Cadaverine

MW : 690.87

Description	Cat.#	Qty
SR101-Cadaverine	FP-M1206A	5 mg

PhosphoKinases probes (PKC) probes

Fim-1, K salt

MW : 793.86

$\lambda_{exc.}/\lambda_{em.}$: 480/524 nm

EC (pH 9) : 27 000 M-1cm-1

Specifically binds and inhibits phosphokinase C at the active site. IC50 = 1.1 μ M (16-fold more than PKA). Used to monitor enzyme activation and translocation. This reagent is not membrane permeable, so Fim-1 diacetate of Rim-1 may be better.

Description	Cat.#	Qty
Fim-1, K salt	FP-68651A	250 μ g

Fim-1 Diacetate

MW : 840.85

$\lambda_{exc.}/\lambda_{em.}$: 464 nm/none

EC : 25 000 M-1cm-1

$\lambda_{exc.}/\lambda_{em.}$ (hydrolyzed) : see Fim-1 (FP-68651)

Membrane permeable PKC indicator. Intracellular hydrolysis gives Fim-1 (FP-68651). Applications : monitoring PKC activity in living cells, as well as fixed and permeabilized cells.

Description	Cat.#	Qty
Fim-1 Diacetate	FP-37042A	250 μ g

Rim-1

MW : 939.13

$\lambda_{exc.}/\lambda_{em.}$ (MetOH) : 561/580 nm

EC : 99 000 M-1cm-1

Rim-1 has similar spectra to Fim-1, but is more stable and can be loaded into cells. IC50 = 0.07 μ M.

Description	Cat.#	Qty
Rim-1	FP-M1550A	250 μ g

Peroxidase for enzyme assays

Please inquire for peroxidase preparations dedicated as enzymes indicator in reaction in which hydrogen peroxide is produced (i.e. glucose oxidase assays for determination of glucose, lipases assays...):

#857280, >60U/mg, RZ>0.6 691.HRP2

#882990 (mainly acidic isoenzymes) >80 PgP U/mg, RZ : ca3.5

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Technical tip

PhosphoKinases probes (PKC) probes

PhosphoKinase C (PKC) is a Ca^{2+} -dependent serine/threonine protein kinase, ubiquitous in eukaryotic cells. PKC activates many biomolecules, including transmembrane signal transduction, ion-channel proteins, and cytoskeletal proteins. 3 ways of PKC activation are reported, via Ca^{2+} , DAG, and lipids. Applications include memory/learning mechanisms.

