

# Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** XIAP Tracer mF-Smac  
**CAS Number:** 783340-88-5

**Catalog No.:** 8069 **Batch No.:** 1

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>51</sub>H<sub>60</sub>N<sub>10</sub>O<sub>11</sub>  
**Batch Molecular Weight:** 989.1  
**Physical Appearance:** Dark yellow lyophilised solid  
**Counter Ion:** TFA  
**Solubility:** Soluble to 2 mg/ml in 25% ethanol / water  
**Storage:** Store at -20°C  
**Peptide Sequence:** Abu-Arg-Pro-Phe-Lys(FAM)-NH<sub>2</sub>

## 2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity  
**Mass Spectrum:** Consistent with structure

## 3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical		Actual		Amino Acid Theoretical		Actual	
Ala				Lys	1.00		0.99
Arg	1.00	0.92	Met				
Asx			Phe	1.00			1.01
Cys			Pro	1.00			0.99
Glx			Ser				
Gly			Thr				
His			Trp				
Ile			Tyr				
Leu			Val				

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**  
info@bio-techne.com  
techsupport@bio-techne.com

**North America**  
Tel: (800) 343 7475

**China**  
info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**  
Tel: +44 (0)1235 529449

**Rest of World**  
www.tocris.com/distributors  
Tel:+1 612 379 2956

**Product Name:** XIAP Tracer mF-Smac**Catalog No.:** 8069**1**

CAS Number: 783340-88-5

**Description:**

XIAP Tracer mF-Smac is a fluorescent labeled peptide used as an acceptor dye with a terbium labeled BIR domain antibody in TR-FRET assays ( $K_d$  values are 4.7 nM at BIR3 (XIAP); 17.9 nM in XIAP polarization assay).

**Physical and Chemical Properties:**Batch Molecular Formula:  $C_{51}H_{60}N_{10}O_{11}$ 

Batch Molecular Weight: 989.1

Physical Appearance: Dark yellow lyophilised solid

**Peptide Sequence:**Abu-Arg-Pro-Phe-Lys(FAM)-NH<sub>2</sub>**Storage:** Store at -20°C**Solubility & Usage Info:**

Soluble to 2 mg/ml in 25% ethanol / water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Counter Ion:** TFA**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

**References:**

**Chaudhry et al** (2016) Building homogeneous time-resolved fluorescence resonance energy transfer assays for characterization of bivalent inhibitors of an inhibitor of apoptosis protein target. *Anal. Biochem.* **497** 8. PMID: 26743718.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956