

**Product Name: Prosaptide TX14(A)**

**Catalog No.: 5151**

**Batch No.: 1**

CAS Number: 196391-82-9

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>69</sub>H<sub>110</sub>N<sub>16</sub>O<sub>26</sub>  
**Batch Molecular Weight:** 1579.72  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 62%  
**Counter Ion:** TFA  
**Solubility:** Soluble to 2 mg/ml in water  
**Storage:** Store at -20°C  
**Peptide Sequence:** Thr-D-Ala-Leu-Ile-Asp-Asn-Asn-Ala-Thr-Glu-Glu-Ile-Leu-Tyr

**2. ANALYTICAL DATA**

**HPLC:** Shows 96% purity  
**Mass Spectrum:** Consistent with structure

**3. AMINO ACID ANALYSIS DATA**

Amino Acid		Theoretical	Actual	Amino Acid		Theoretical	Actual
Ala		2.00	2.02	Lys			
Arg				Met			
Asx		3.00	2.85	Phe			
Cys				Pro			
Glx		2.00	1.97	Ser			
Gly				Thr	2.00	1.80	
His				Trp			
Ile		2.00	2.03	Tyr	1.00	1.01	
Leu		2.00	1.96	Val			

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

Tocris Bioscience is an R&D Systems company

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**Description:**

Potent GPR37L1 and GPR37 agonist (EC<sub>50</sub> values are 5 and 7 nM, respectively). Stimulates signaling through pertussis toxin-sensitive G proteins. Stimulates ERK phosphorylation. Protects against cellular stress. Promotes myelin lipid synthesis and prolongs cell survival in both Schwann cells and oligodendrocytes; neuroprotective and glioprotective.

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Physical Appearance: White lyophilised solid

**Peptide Sequence:**

**Thr-D-Ala-Leu-Ile-Asp-Asn-Asn-Ala-Thr-Glu-Glu-Ile-Leu-Tyr**

**References:**

**Hiraiwa *et al*** (1997) Cell death prevention, mitogen-activated protein kinase stimulation, and increased sulfatide concentrations in Schwann cells and oligodendrocytes by prosaposin and prosaptides. *Proc.Natl.Acad.Sci.USA.* **94** 4778. PMID: 9114068.

**Meyer *et al*** (2013) GPR37 and GPR37L1 are receptors for the neuroprotective and glioprotective factors prosaptide and prosaposin. *Proc.Natl.Acad.Sci.USA.* **110** 9529. PMID: 23690594.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

Soluble to 2 mg/ml in water

This product is supplied as a lyophilized solid and may 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.

**Net Peptide Content:** 62% (Remaining weight made up of counterions and residual water).

**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).

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