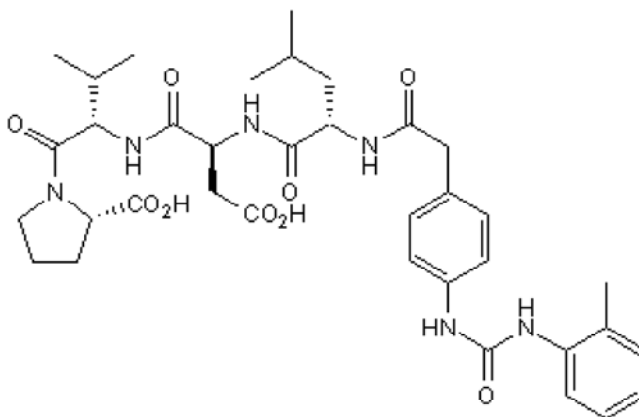


**Product Name:** BIO 1211  
**CAS Number:** 187735-94-0

**Catalog No.:** 3910 **Batch No.:** 5

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>36</sub>H<sub>48</sub>N<sub>6</sub>O<sub>9</sub>  
**Batch Molecular Weight:** 708.8  
**Physical Appearance:** White lyophilised solid  
**Net Peptide Content:** 78%  
**Counter Ion:** TFA  
**Solubility:** Soluble to 2 mg/ml in water  
**Storage:** Store at -20°C  
**Peptide Sequence:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.2% purity  
**Mass Spectrum:** Consistent with structure

**3. AMINO ACID ANALYSIS DATA**

Amino Acid Theoretical		Actual		Amino Acid Theoretical		Actual	
Ala				Lys			
Arg				Met			
Asx	1.00	0.99		Phe			
Cys				Pro	1.00	0.99	
Glx				Ser			
Gly				Thr			
His				Trp			
Ile				Tyr			
Leu	1.00	0.96		Val	1.00	1.05	

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

**Product Name:** BIO 1211  
CAS Number: 187735-94-0

**Catalog No.:** 3910 **Batch No.:** 5

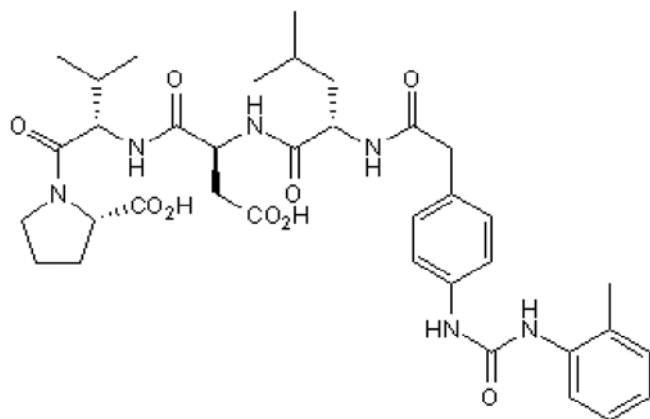
**Description:**

Selective, high affinity  $\alpha_4\beta_1$  (Very Late Antigen 4; VLA-4) inhibitor; displays 200-fold selectivity for the activated form of  $\alpha_4\beta_1$  ( $K_D = 70$  pM;  $IC_{50} = 0.004$   $\mu$ M). Selective for  $\alpha_4\beta_1$  over a range of other integrins ( $IC_{50} > 100$   $\mu$ M for  $\alpha_1\beta_1$ ,  $\alpha_5\beta_1$  and  $\alpha_6\beta_1$ ).

**Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{36}H_{48}N_6O_9$   
Batch Molecular Weight: 708.8  
Physical Appearance: White lyophilised solid

**Peptide Sequence:**



**Storage:** Store at  $-20^{\circ}C$

**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:** 78% (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  $45-60^{\circ}C$  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  $-20^{\circ}C$ . 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  $0.2$   $\mu$ m filter to remove potential bacterial contamination whenever possible.

**References:**

- Muro et al** (2009) Discovery of *trans*-4-[1-[[2,5-Dichloro-4-(1-methyl-3-indolylcarboxamido)phenyl]acetyl]-(4*S*)-methoxy-(2*S*)-pyrrolidinylmethoxy]cyclohexanecarboxylic acid: an orally active, selective very late antigen-4 antagonist. *J.Med.Chem.* **52** 7974. PMID: 19891440.
- Chen et al** (1999) Multiple activation sites of integrin  $\alpha_4\beta_1$  detected through their different affinities for a small molecule ligand. *J.Biol.Chem.* **274** 13167. PMID: 10224072.
- Lin et al** (1999) Selective, tight-binding inhibitors of integrin  $\alpha_4\beta_1$  that inhibit allergic airway responses. *J.Med.Chem.* **42** 920. PMID: 10072689.

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