ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

| | | |
|---|---|---|
| **Cat. SP-52307-1** | **RGDV (Arg-Gly-Asp-Val) peptide** | **SIZE:** 5 mg |
| **Cat. SP-52306-5** | **RGDS (Arg-Gly-Asp-Ser)peptide** | **SIZE:** 5 mg |
| **Cat. SP-52305-1** | **RGD (Arg-Gly-Asp)peptide** | **SIZE:** 5 mg |
| **Cat. SP-52304-1** | **RFDS (Arg-Phe-Asp-Ser)peptide** | **SIZE:** 5 mg |

Integrins are heterodimeric cell surface receptors that were found in early studies to mediate adhesion between cells and the extracellular matrix (ECM), by binding to ligands with an exposed arginine-glycineaspartate (RGD) sequence. These receptors also stimulate intracellular signaling and gene expression involved in cell growth, migration, and survival. These same processes, if not properly regulated, can lead to thrombosis, inflammation, and cancer. In fact, integrins have been demonstrated to be participants in these diseases and can also act as disease markers. Because of this, research has focused on developing RGD peptides that could mimic cell adhesion proteins and bind to integrins. The diverse applications for these peptides include inhibiting apoptosis, angiogenesis, and tumor formation, coating surfaces for use as biomaterials, enhancing drug delivery systems, and imaging for diagnostic purposes.

ADI offers a variety of RGDS modified peptides. RGD peptides are proving to be promising new tools for drug therapy and imaging of tumors, thrombosis, and inflammatory-related diseases. Peptides International provides the proper tools for further exploration and manipulation of this intriguing group of peptides for research applications.

**Source of Peptide**

Cat# SP-52305-1 RGD peptide

| | |
|---|---|
| Sequence | Arg-Gly-Asp (R-G-D) |
| MW | 346.3 |
| Formula | $C_{12}H_{22}N_6O_6$ |
| Purity | >95% |
| Form | Powder |

Cat# SP-52306-5 (RGDS peptide)

| | |
|---|---|
| Sequence | Arg-Gly-Asp-ser (R-G-D-S) |
| MW | 433.4 |
| Formula | $C_{15}H_{27}N_7O_8$ |
| Purity | >95% |
| Form | Powder |

Cat# SP-52307-1 (RGDV peptide)

| | |
|---|---|
| Sequence | Arg-Gly-Asp-Val (R-G-D-V) |
| MW | 445.5 |
| Formula | $C_{17}H_{31}N_7O_7$ |
| Purity | >95% |
| Form | Powder |

Cat# SP-52304-1 (RFDS peptide)

| | |
|---|---|
| Sequence | Arg-Phe-Asp-Ser (R-F-D-S) |
| MW | 523.5 |
| Formula | |
| Purity | >95% |
| Form | Powder |

**Solubility**: Dissolve peptides in DMF at 1-5 mg/ml and then dilute in other buffers. Alternatively, some peptides can also be dissolve in water or buffers depending upon the solubility in a given buffer.

**Form & Storage of Antibodies/Peptide Control**

**Storage**

**Short-term**: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

**Long-term**: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability**: 6-12 months at –20oC or below.
**Shipping**: 4oC for solutions and room temp for powder

**General References**: Yip KP (1997) Am. J. Physiool 273, F768; Reed J (1988) Eur. J. Biochem. 178, 141; Gartner TK (1985) JBC 260, 11891;

*This product is for in vitro research use only.

**Related Items**
Angiotensin I, II, and III and antibodies

Antibodies to angiotensin receptors type I and II

SP-52305-1 10712A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com