ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

□ Cat. # SP-52307-1 RGDV peptide SIZE: 5 mg

The RGD peptide is a cell adhesion motif which can mimic cell adhesion proteins and bind to integrins

The RGD sequence is the cell attachment site of a large number of adhesive extracellular matrix, blood, and cell surface proteins, and nearly half of the over 20 known integrins recognize this sequence in their adhesion protein ligands. The RGD peptides and mimics can be used to probe integrin functions in various biological systems. Drug design based on the RGD structure may provide new treatments for diseases such as thrombosis, osteoporosis, and cancer. RGD peptide acts as an inhibitor of integrin-ligand interactions and can induce apoptosis in the absence of signals and integrin-mediated cell clustering. Research demonstrates that RGD peptides promote apoptosis through activation of conformation changes that enhance pro-caspase-3 activation and auto processing. The RGD peptide can serve as a cell adhesion site of extracellular matrix, cell surface proteins, and integrins. In addition, RGD peptide can inhibit ACK-2 activation through cell adhesion.

Many adhesive proteins interact with platelet GP IIb-IIIa through a common RGD (Arg-Gly-Asp) peptide recognition sequence, which is also found in other adhesive molecules (e.g., collagen, laminin, thrombospondin, and vitronectin; 16-21), synthetic RGD-containing peptide analogues of the cell-binding domains of adhesive proteins may also represent an important therapeutic strategy. In vitro such peptides have been shown to block adhesive protein binding to platelets (18, 21-23) and inhibit both platelet adhesion and aggregation (18, 20-26).

Sources of Peptide

Cat # SP-52307-1
Sequence: H-Arg-Gly-Asp-Val-OH;
Mol Wt: 445.5
Form: Powder
Purity >95%

After reconstitution in water, store solution in small aliquots at -20oC for 3-6 months. Do not freeze and thaw or store diluted solutions.

Storage: Store powder at -20oC for up to 6 months.

Stability: 6-12 months at –20^{o}C or below.

Shipping: 4^{o}C for solutions and room temp for powder

General References:
*This product is for In vitro research use only.

Related items:

Catalog#	ProdDescription
SP-51771-1	RGD-4C
SP-52305-1	RGD peptide
SP-52306-5	RGDS peptide
SP-52307-1	RGDV peptide

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