PRODUCT INFORMATION



CH₃CO₂H

H-Gly-Pro-Arg-Pro-OH (acetate)

Item No. 21163

CAS Registry No.: 157009-81-9

Formal Name: glycyl-L-prolyl-L-arginyl-L-proline, monoacetate

Synonym:

MF: $C_{18}H_{31}N_7O_5 \bullet C_2H_4O_2$

FW: 485.5 **Purity:**

 λ_{max} : 208, 279 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

H-Gly-Pro-Arg-Pro-OH (GPRP) (acetate) is supplied as a crystalline solid. Aqueous solutions of GPRP acetate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of GPRP acetate in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GPRP is a peptide corresponding partly to the amino terminus of the Aa chain and B\u03c3 chain of fibrin. It inhibits the spontaneous polymerization of fibrin monomers and also inhibits ADP-induced platelet aggregation ($IC_{50} = 3 \text{ mM}$). ¹⁻³ GPRP binds to the fibrinogen D domain, inhibiting the ability of fibrinogen to bind to the platelet membrane glycoprotein GPIIb/IIIa.^{1,2}

References

- 1. Laudano, A.P. and Doolittle, R.F. Synthetic peptide derivatives that bind to fibrinogen and prevent the polymerization of fibrin monomers. Proc. Natl. Acad. Sci. USA 75(7), 3085-3089 (1978).
- 2. Plow, E.F. and Marguerie, G. Inhibition of fibrinogen binding to human platelets by the tetrapeptide glycyl-L-prolyl-L-arginyl-L-proline. Proc. Natl. Acad. Sci. USA 79(12), 3711-3715 (1982).
- Adelman, B., Gennings, C., Stony, J., et al. Synergistic inhibition of platelet aggregation by fibrinogenrelated peptides. Circ. Res. 67(4), 941-947 (1990).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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