Ala-Gln
Cell Culture Tested
Insect Cell Culture Tested

Product Number: A 8185
Store at Room Temperature

Product Description
Molecular Formula: C₈H₁₅N₃O₄
Molecular Weight: 217.2
CAS Number: 39537-23-0
Synonym: alanyl-glutamine, L-alanyl-L-glutamine

This product is cell culture tested (0.5 mg/ml) and insect cell culture tested (0.2 mg/ml). It is appropriate for use in cell culture and insect cell culture applications at 2-10 mM.

Alanyl-glutamine (Ala-Gln) is a dipeptide that is used as a substitute for glutamine in mammalian cell culture media, because of the instability of glutamine in solution and the formation of ammonia as a breakdown product of glutamine in solution, which can have deleterious effects on cells in culture.¹ Ala-Glu is stable to heat sterilization and is less ammoniagenic than glutamine, which contributes to its advantages as a media component.²

Ala-Gln has been used in studies on injury and sepsis, and on the effects of irradiation on leucine and protein metabolism in vivo.³,⁴ Ala-Gin has been utilized to investigate polymorphonuclear leucocyte and myeloperoxidase activity in vitro.⁵

An ion-pair reversed-phase LC ESI MS method for the analysis of various small peptides, including Ala-Gln, has been published.⁶ The degradation kinetics of Ala-Gln and other glutamine dipeptides have been investigated.⁷

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (50 mg/ml), yielding a clear, colorless solution.

References

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