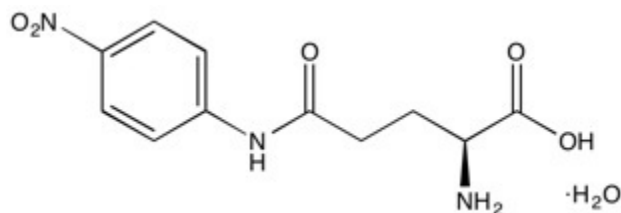


gamma-L-Glutamyl-p-nitroanilide HCl, L-glutamine uptake inhibitor and gamma-glutamyl transpeptidase substrate

Catalog	Unit
TBI4568-100MG	100 mg
TBI4568-250MG	250 mg

Product Details

Alternate Names: GPNA
Molecular Formula: C₁₁H₁₃N₃O₅ · HCl
Formula Weight: 303.70
CAS Number: 67953-08-6
Purity: >98%
Formulation: powder
Solubility: Soluble in Water (up to 5 mg/ml).
Storage: -20°C
Stability: ≥ 1 year.



Applications

L-glutamine uptake inhibitor and gamma-glutamyl transpeptidase substrate

Functions

L-γ-Glutamyl-p-nitroanilide (GPNA) is a substrate for γ-glutamyl transpeptidase. GPNA is used for the determination of γ-glutamyl transpeptidase hydrolytic activity via spectrophotometric monitoring of p-nitroaniline released by the action of the enzyme on GPNA. GPNA has also been shown to be an inhibitor of glutamine uptake – solute-linked carrier family A1 member 5 (SLC1A5). Cellular uptake of L-glutamine (regulated by SLC1A5) is a rate-limiting step that activates mTOR and is, thus, an interesting cancer chemotherapy target.

Application Procedures

First dissolved in Water (up to 5 mg/ml), then diluted to aqueous buffer. Solutions in distilled water may be stored at -20°C for up to 1 month.

For research use only.