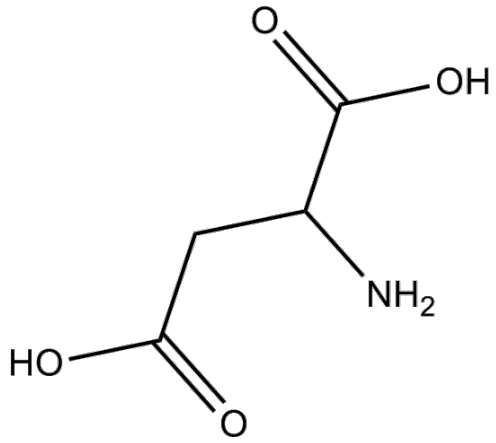
Product Data Sheet

Product Name: H-Asp-OH
Cat. No.: GA11120

Chemical Properties

Cas. No.	56-84-8		
Chemical Name	(2S)-2-aminobutanedioic acid		
SMILES	C(C(C(=O)O)N)C(=O)O		
Formula	$C_4H_7NO_4$	M.Wt	133.1
Solubility	100 mg/mL in 1M NaOH(Need ultrasonic,Alkaline dissolution (adjusted with NaOH, pH ≈ 11)); 2 mg/mL in Water (ultrasonic and warming and heat to 60°C).	Storage	Store at -20° C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

L-Aspartic acid is is an amino acid, shown to be a suitable prodrug for colon-specific drug deliverly.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

L-Aspartic acid is shown to be a suitable prodrug for colon-specific drug deliverly[1]. L-[3H]Asp remaining in the brain at 5 min is increased by 206 and 178% by preadministration of 100 mM L-Aspartic acid and 100 mM L-Glu, respectively, whereas 100 mM D-Asp does not affect L-[3H]Asp efflux transport. That value for L-[3H]Glu at 20 min is increased by 145 and 156% by coadministration with 100 mM L-Aspartic acid and 100 mM L-Glu, respectively, but not by D-Asp. It is interesting that the apparent efflux rate of L-Aspartic acid across the BBB is sevenfold faster than that of L-Glu[2].

References:

[1]. Leopold CS, et al. In vivo pharmacokinetic study for the assessment of poly(L-aspartic acid) as a drug carrier for colon-specific drug delivery. J Pharmacokinet Biopharm. 1995 Aug;23(4):397-406.
[2]. Hosoya K, et al. Blood-brain barrier produces significant efflux of L-aspartic acid but not D-aspartic acid: in vivo evidence using the brain efflux index method. J Neurochem. 1999 Sep;73(3):1206-11.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA