

Product Name : N-Acetyl-L-aspartic acid
Synonyms : AC-ASP-OH; N-Acetylaspartic acid
Cat No. : M19988
CAS Number : 997-55-7
Molecular Formula : C₆H₉NO₅
Formula Weight : 175.14
Chemical Name : —

Description : N-Acetylaspartic acid is a derivative of aspartic acid. It is the second most concentrated molecule in the brain after the amino acid glutamate. It is synthesized in neurons from the amino acid aspartate and acetyl coenzyme A (acetyl CoA). The various functions served by N-acetylaspartic acid are still under investigation but the primary proposed functions include (1) acting as a neuronal osmolyte that is involved in fluid balance in the brain (2) serving as a source of acetate for lipid and myelin synthesis in oligodendrocytes (the glial cells that myelinate neuronal axons) (3) serving as a precursor for the synthesis of the important dipeptide neurotransmitter N-acetylaspartylglutamate (NAAG) and (4) playing a potential role in energy production from the amino acid glutamate in neuronal mitochondria.

Pathway : Others

Target : Other Targets

Receptor : Others

Solubility : DMSO:10 mM

SMILES : CC(=O)N[C@@H](CC(O)=O)C(O)=O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.Sreekumar A et al. Metabolomic profiles delineate potential role for sarcosine in prostate cancer progression. Nature. 2009 Feb 12;457(7231):910-4.