

N-Acetyl lysyltyrosylcysteine amide acetate

Chemical Properties

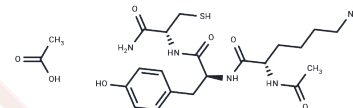
CAS No. :

Formula: C₂₂H₃₅N₅O₇S

Molecular Weight: 513.61

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	N-Acetyl lysyltyrosylcysteine amide acetate is an effective and selective tripeptide inhibitor of myeloperoxidase (MPO). N-Acetyl lysyltyrosylcysteine amide acetate inhibits MPO-dependent hypochlorous acid (HOCl) generation, protein nitration, and LDL ox
Targets(IC50)	Glutathione Peroxidase
In vivo	N-Acetyl lysyltyrosylcysteine amide acetate (10 mg/kg; i.p.; daily 7 days) significantly protects BBB function and decreased neutrophil infiltration. N-Acetyl lysyltyrosylcysteine amide acetate (10 mg/kg; i.p.; daily 7 days) significantly reduces microglia/macrophage activation and neuron loss in MCAO mice. N-Acetyl lysyltyrosylcysteine amide acetate (10 mg/kg; i.p.; daily for 3-7 days) decreases apoptosis and cell injury in the brains of MCAO mice. N-Acetyl lysyltyrosylcysteine amide acetate reduced MPO in the brains of MCAO mice. N-Acetyl lysyltyrosylcysteine amide acetate reduces NO ₂ Tyr and 4-HNE in MCAO mice. N-Acetyl lysyltyrosylcysteine amide acetate significantly decreases infarct size, blood-brain barrier leakage, infiltration of myeloid cells, loss of neurons, and apoptosis in the brains of middle cerebral artery occlusion (MCAO) mice. N-Acetyl lysyltyrosylcysteine amide acetate (10 mg/kg; i.p.; daily for 3-7 days) significantly reduces neurological severity scores and infarct size in MCAO mice[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.947 mL	9.735 mL	19.470 mL
5 mM	0.3894 mL	1.947 mL	3.894 mL
10 mM	0.1947 mL	0.9735 mL	1.947 mL
50 mM	0.0389 mL	0.1947 mL	0.3894 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang H, et al. N-acetyl lysyltyrosylcysteine amide inhibits myeloperoxidase, a novel tripeptide inhibitor. *J Lipid Res.* 2013;54(11):3016-3029.

Yu G, et al. Inhibition of myeloperoxidase oxidant production by N-acetyl lysyltyrosylcysteine amide reduces brain damage in a murine model of stroke [published correction appears in *J Neuroinflammation.* 2016;13(1):166]. *J Neuroinflammation.* 2016;13(1):11

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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