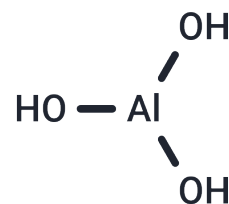


## Aluminum Hydroxide

## Chemical Properties

CAS No. :	21645-51-2
Formula:	AlH3O3
Molecular Weight:	78
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	Aluminum Hydroxide is an orally active primary form of aluminum used as an adjuvant. Research on aluminum hydroxide-based adjuvants includes examining its repository effect, pro-phagocytic effect, and activation of the pro-inflammatory NLRP3 pathway.
Targets(IC50)	Others,NOD-like Receptor (NLR)
In vivo	Administered orally at a dosage of 100 mg/kg/day for a duration of seven days, Aluminum Hydroxide enhances lipid peroxidation while simultaneously reducing the activity of Superoxide Dismutase (SOD) in the brain. Additionally, it is capable of dissolving in distilled water to form a homogeneous suspension [3].

## Solubility Information

Solubility	DMSO: < 1 mg/mL (insoluble),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	12.8205 mL	64.1026 mL	128.2051 mL
5 mM	2.5641 mL	12.8205 mL	25.641 mL
10 mM	1.2821 mL	6.4103 mL	12.8205 mL
50 mM	0.2564 mL	1.2821 mL	2.5641 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

He P, et al. Advances in aluminum hydroxide-based adjuvant research and its mechanism. Hum Vaccin Immunother. 2015;11(2):477-88.

Amini Y, et al. Aluminum hydroxide nanoparticles show strong activity to stimulate Th-1 immune response against tuberculosis. Artif Cells Nanomed Biotechnol. 2017 Nov;45(7):1331-1335.

Ohtawa M, et al. Effect of aluminum ingestion on lipid peroxidation in rats. Chem Pharm Bull (Tokyo). 1983 Apr;31(4):1415-8.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481