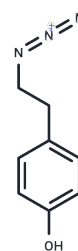


## 4-(2-Azidoethyl)phenol

## Chemical Properties

CAS No. :	74447-34-0
Formula:	C <sub>8</sub> H <sub>9</sub> N <sub>3</sub> O
Molecular Weight:	163.18
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	4-(2-Azidoethyl)phenol is a bifunctional small molecule probe featuring both a phenolic hydroxyl group and an azide structure. Its core application lies in the phenol moiety serving as a substrate for APEX2 (ascorbate peroxidase), generating reactive radicals in situ in the presence of H <sub>2</sub> O <sub>2</sub> to label neighboring proteins. Concurrently, the terminal azide group can be linked to alkyne-labeled detection molecules via copper-catalyzed azide-alkyne cycloaddition (CuAAC) to achieve biotinylation or fluorescence visualization. 4-(2-Azidoethyl)phenol is widely used in proximity labeling-based proteomics research.
Targets(IC50)	Others
In vitro	4-(2-Azidoethyl)phenol exhibits moderate and stable RNA labeling activity in an in vitro APEX2-mediated proximity labeling system [1]. 4-(2-Azidoethyl)phenol (2 mM; 15 min pre-incubation + 3 min H <sub>2</sub> O <sub>2</sub> treatment) exhibits strong RNA labeling efficiency in live HEK 293T cells expressing mito-APEX2, outperforming most tested APEX2 probes and being second only to Ph_ylne [1]. 4-(2-Azidoethyl)phenol (2 mM; 15 min pre-incubation + 3 min H <sub>2</sub> O <sub>2</sub> treatment) can highly specifically enrich mitochondrially encoded RNA from HEK 293T cells expressing mito-APEX2 via CuAAC- and SPAAC-mediated biotinylation, with minimal enrichment of cytoplasmic GAPDH mRNA [1]. 4-(2-Azidoethyl)phenol (2 mM; 15 min pre-incubation + 3 min H <sub>2</sub> O <sub>2</sub> treatment) enables high-sensitivity, high-specificity enrichment of mitochondrial-encoded RNA across the entire transcriptome in HEK 293T cells expressing mito-APEX2, without significantly enriching cytoplasmic RNA [1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (490.26 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	6.1282 mL	30.641 mL	61.282 mL
5 mM	1.2256 mL	6.1282 mL	12.2564 mL
10 mM	0.6128 mL	3.0641 mL	6.1282 mL
50 mM	0.1226 mL	0.6128 mL	1.2256 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

Liang J, et al. Clickable APEX2 Probes for Enhanced RNA Proximity Labeling in Live Cells. *Anal Chem.* 2024;96(2): 685-693.

Mondal M, et al. Fragment-Based Drug Design Facilitated by Protein-Templated Click Chemistry: Fragment Linking and Optimization of Inhibitors of the Aspartic Protease Endothiapepsin. *Chemistry.* 2016 Oct 10;22(42):14826-14830.

**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