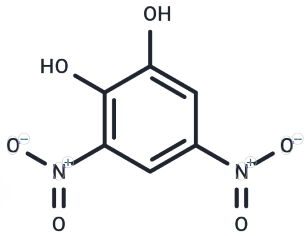
# Data Sheet (Cat.No.T23109)

TargetMol

## 3,5-Dinitrocatechol

### Chemical Properties



CAS No. : 7659-29-2

Formula: C6H4N2O6

Molecular Weight: 200.11

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 | OR-486 is an inhibitor of catechol-O-methyl-transferase(COMT) and can be used to prepare the molybdenum (VI)- 3,5-Dinitrocatechol complex. |
| Targets(IC50) | Others,Transferase |
| In vitro | OR-486 is highly effective (IC50 = 12 nM) and selective in inhibiting COMT activity in vitro [3]. |
| In vivo | In mouse trachea (β1-AR dominant), significant suppression of ISO-induced relaxation was observed with the addition of OR-486. In GP trachea, in the presence of clorgiline plus OR-486, both normetadrenaline (NMA) and metadrenaline (MA) (10-4 M) significantly suppressed ISO-induced relaxation[1]. |

### Solubility Information

| | |
|---|---|
| Solubility | Ethanol: < 20.01 mg/mL,Sonication is recommended.<br>DMSO: 50 mg/mL (249.86 mM),Sonication is recommended.<br>H2O: 0.17 mg/mL (0.85 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 4.9973 mL | 24.9863 mL | 49.9725 mL |
| 5 mM | 0.9995 mL | 4.9973 mL | 9.9945 mL |
| 10 mM | 0.4997 mL | 2.4986 mL | 4.9973 mL |
| 50 mM | 0.0999 mL | 0.4997 mL | 0.9995 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

Yamaki F, et, al. Effects of Catecholamine Metabolites on Beta-Adrenoceptor-Mediated Relaxation of Smooth Muscle: Evaluation in Mouse and Guinea-Pig Trachea and Rat Aorta. Biol Pharm Bull. 2020;43(3):493-502.
Stojnova K, et, al. Study on the Complex Equilibria of Molybdenum(VI) with 3,5-Dinitrocatechol and Ditetrazolium Salt. Acta Chim Slov. 2016;63(3):654-60.
Nissinen E, et, al. Inhibition of catechol-O-methyltransferase activity by two novel disubstituted catechols in the rat. Eur J Pharmacol. 1988 Aug 24;153(2-3):263-9.