TargetMol®
A DRUG SCREENING EXPERT

Product Handling Instructions

1 How to properly handle the product?

During transportation, the product may move around within its packaging, resulting in the product adhering to the neck or cap of the vial. Please take the vial out of its packaging and centrifuge the vial between 200-500 RPM to gather the product at the bottom of the vial. This will minimize loss or contamination during subsequent handling.

TargetMol® products are typically obtained by chemical synthesis. The products are not temperature sensitive since the reactions usually occur between 50-80°C. Therefore, there will not be any negative effects on the products if the ice pack has melted during shipping. TargetMol® will follow special procedures and provide specific instructions for products that require low-temperature transportation.

2 What is the margin of error during the weighing of the product?

Weighing Range	Error Range
5-25 mg	0.1 mg
50-500 mg	1 mg
>1 g	2-5 mg

3 How to prepare the stock solution?

Please select a suitable solvent to prepare the concentrated stock solution according to the experiment requirements. Solubility information can be found on the product page of our website. For in-vitro experiments, DMSO is often used as the solvent.

The stock solution is then diluted to make a working solution (e.g., 1:1000 dilution in cell culture medium).

Here are some recommendations for dissolving the product:

(1) Recalculate the concentration of the stock solution according to the following formula:

Actual Concentration (mg/mL) = Molecular Weight (g/mol) × Concentration (mM) × 10^{-3}

(2) Check to see if the solvent has been contaminated, e.g., DMSO absorbs moisture.

(3) Some compounds are difficult to dissolve due to their structure and chemical characteristics and may require additional mixing such as vortexing or ultrasonication. When necessary, heating the compound may also help in the dissolution process. But remember not to heat the compound higher than 45°C to prevent altering the product.

(4) If you require additional assistance, please send the email to **tech@targetmol.com.**

4 How to store the product?

Store at -20°C or -80°C
Aliquot stock solution to routine usage volumes and store at -20°C or -80°C. Avoid repeated freezing and thawing.

5 How to prepare the working solution?

(1) Calculate the dilution required by using our dilution calculator.

inquiry@targetmol.com
(781) 999-4286
Official Website
https://www.targetmol.com/
36 Washington Street, Wellesley Hills, MA 02481 USA
Facebook
Linkedin
Instagram

(2) Slowly add the stock solution into the solvent until the desired concentration is obtained. Mix by vortexing or repeated pipetting.

(3) If precipitation is present in the working solution, allow the working solution to stand for 10 minutes, vortex or pipette mixing and then recheck.

(4) Our compounds are mostly liposoluble. Precipitation may be present when diluted using aqueous solvents such as cell culture medium or PBS. A complete dissolution can be achieved by ultrasonication.

6 How to sterilize the working solution?

Generally, it is not necessary to conduct serialization if the DMSO is used as the solvent, which itself has strong bactericidal activity. If you decide to proceed with the sterilization, we suggest sterilizing the working solution by filtration. DO NOT sterilize the working solution by autoclaving.

7 What should I pay attention to for cell-based assays?

DMSO is used to prepare the stock solution in most cell-based assays. The stock solution is diluted in the culture medium to prepare a working solution. Make sure the concentration of DMSO is <=0.1% to avoid poisoning the cells. Usually, the negative control in the experiment is the culture medium with DMSO at the same concentration.

8 What should I pay attention to for animal experiments?

(1) Our compounds are mostly liposoluble. If DMSO is used to prepare the stock solution and then diluted to prepare the working solution for animal experiments, it may not be possible to obtain the required doses. Instead, hydrotropic agents, such as sodium carboxymethyl cellulose (CMC-Na), Tween 80, or glycerol, are needed.

(2) Conversion chart between different animal models:

Group A Animals					
Conversion Coefficient		Mouse (20g)	Rat (200g)	Rabbit (1.5kg)	Dog (12kg)
Group B Animals	Mouse (20g)	1.0	1.6	2.7	4.8
	Rat (200g)	0.7	1.0	1.88	3.6
	Rabbit (1.5kg)	0.37	0.52	1.0	1.76
	Dog (12kg)	0.21	0.28	0.56	1.0

For example, to convert the dose used in a mouse (20m/kg) to the dose used for a 1.5kg Rabbit:

Group A Animal: mouse; Group B Animal: Rabbit;

Conversion Coefficient: 0.37

The dose used in the Rabbit would be 1.5kg* (0.37*20mg/kg) =11.1mg.

9 Do I need to weigh the product after it is received?

There is no need to weigh the product after it is received. You can add the solvent to prepare the stock solution directly. If you purchase the bulk size product, we suggest you weigh the certain amount of product to prepare the stock solution and store the remaining product at -20°C or -80°C.

10 What are the safety precautions I must take when using products from TargetMol® ?

You can download the material safety data sheet (MSDS) from the product page for hazard identifications, first aid measures, firefighting measures, etc.

If you have any inquiries, please contact our technical support by email:

tech@targetmol.com

* All products are for Research Use Only. Not for Human or Veterinary or Therapeutic Use.