

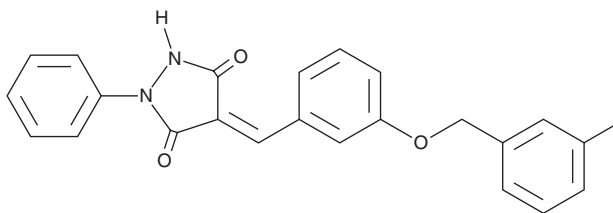
# PRODUCT INFORMATION



Y16

Item No. 42399

**CAS Registry No.:** 429653-73-6  
**Formal Name:** 4-[[3-[(3-methylphenyl)methoxy]phenyl]methylene]-1-phenyl-3,5-pyrazolidinedione  
**MF:** C<sub>24</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 384.4  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

Y16 is supplied as a solid. A stock solution may be made by dissolving the Y16 in the solvent of choice, which should be purged with an inert gas. Y16 is sparingly soluble (1-10 mg/ml) in DMSO.

## Description

Y16 is an inhibitor of the protein-protein interaction between Rho guanine nucleotide exchange factor 12 (Rho GEF 12), also known as leukemia-associated Rho GEF (LARG), and RhoA.<sup>1</sup> It binds to the DH-PH domain of Rho GEF 12 in a cell-free assay ( $K_d = 76$  nM) and inhibits serum-induced phosphorylation of MLC and FAK, a marker of RhoA activity, in NIH3T3 cells when used at concentrations of 10 and 30  $\mu$ M. Y16 (5-30  $\mu$ M) inhibits cell growth, migration, invasion, and mammosphere formation in MCF-7 breast cancer cells.

## Reference

1. Shang, X., Marchioni, F., Evelyn, C.R., et al. Small-molecule inhibitors targeting G-protein-coupled Rho guanine nucleotide exchange factors. Proc. Natl. Acad. Sci. USA 110(8), 3155-3160 (2013).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/16/2024

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM