# abcam

### Product datasheet

## Dynole® 34-2, dynamin I and dynamin II inhibitor ab120463

12 References 3 图像

概述

产品名称 Dynole® 34-2, dynamin I and dynamin II抑制剂

描述 Potent dynamin I and dynamin II抑制剂

生物学描述 Potent, cell-permeable dynamin I and dynamin II inhibitor (IC<sub>50</sub> values are 1.3 and 14.2 µM for

inhibition of dynamin I and II GTPase, respectively). Targets the GTPase domain at an allosteric site. Potently inhibits receptor-mediated and synaptic vesicle endocytosis ( $IC_{50}$  values are 5 and

41.1 µM, respectively). 15-fold more active than Dynasore (ab120192) against dynamin I.

常规说明 Sold under exclusive licence from Children's Medical Research Institute and Newcastle Innovation

Ltd. Dynole® is a trademark of Children's Medical Research Institute and Newcastle Innovation

Ltd.

**CAS编号** 1128165-88-7

化学结构

CH<sub>3</sub>

性能

化学名称 2-Cyano-*N*-octyl-3-[1-(3-dimethylaminopropyl)-1*H*-indol-3-yl]acrylamide

分子量 408.59

**分子式** C<sub>25</sub>H<sub>36</sub>N<sub>4</sub>O

PubChem识别号 44157463

**存放说明** Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

溶解度概述 Soluble in DMSO to 100 mM

处理 Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

prior to opening the vial we recommend that you allow your product to equilibrate to room

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temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

**SMILES** 

CCCCCCCNC(=O)C(C#N) = Cc2cn(CCCN(C)C)c1ccccc12

来源

Synthetic

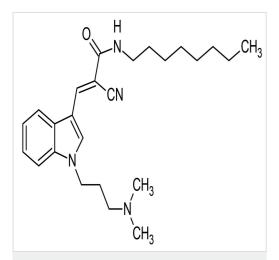
#### 应用

The Abpromise guarantee Abpromise™承诺保证使用ab120463于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

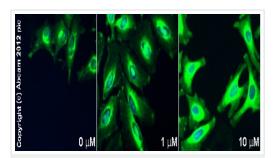
应用	Ab评论	说明
Functional Studies		Use at an assay dependent concentration.

#### 图片



Chemical Structure - Dynole® 34-2, dynamin I and dynamin II inhibitor (ab120463)

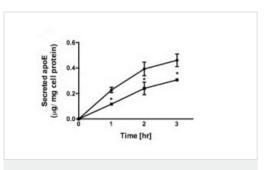
2D chemical structure image of ab120463, Dynole® 34-2, dynamin I and dynamin II inhibitor



Immunocytochemistry/ Immunofluorescence - Dynole® 34-2, dynamin I and dynamin II inhibitor (ab120463) <u>ab66705</u> staining PAI1 in HeLa cells treated with dynole-34-2<sup>™</sup>; (ab120463), by ICC/IF. Increase in PAI1 expression correlates with increased concentration of dynole-34-2<sup>™</sup>, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120463 (dynole-34- $2^{TM}$ ) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab66705** (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit

polyclonal antibody (<u>ab96899</u>) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.



Functional Studies - Dynole® 34-2, dynamin I and dynamin II inhibitor (ab120463)

Image from Kockx et al., PLOS One., 9(10): e111186. Fig 1F.; doi: https://doi.org/10.1371/journal.pone.0111186. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Primary human monocyte-derived macrophages (HMDM) were incubated with 30  $\mu$ M of ab120463 for indicated time periods to determine if Dynamin inhibition decreases apoE secretion from primary human macrophages. Dynole-34-2 both dose- and time-dependently decreased apoE secretion without affecting HMDM viability (botton line on the graph as appose to the control, top line).

Kockx et al., PLOS One., 9(10): e111186. Fig 1F.; doi: https://doi.org/10.1371/journal.pone.0111186.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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