abcam

Product datasheet

# trans-Retinoic acid, Stem cell differentiator ab120728

4 References 2 Images

## Overview

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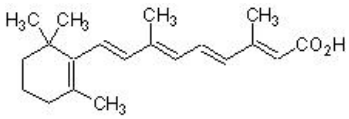
|---|---|
| **Product name** | trans-Retinoic acid, Stem cell differentiator |
| **Description** | Vitamin A metabolite. Stem cell differentiator. |
| **Purity** | > 99% |
| **CAS Number** | 302-79-4 |
| **Chemical structure** |  |

## Properties

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|---|---|
| **Chemical name** | 3,7-Dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2*E*,4*E*,6*E*,8*E*-nonatetraenoic acid |
| **Molecular weight** | 300.44 |
| **Molecular formula** | $C_{20}H_{28}O_2$ |
| **Storage instructions** | Store at -20°C. It is important to note that this product is reported to be light sensitive. Store In the Dark. Store under desiccating conditions. The product can be stored for up to 12 months. |
| **Solubility overview** | Soluble in DMSO to 25 mM and in ethanol to 10 mM |
| **Handling** | 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 temperature for at least 1 hour.<br>Toxic, refer to SDS for further information.<br>Need more advice on solubility, usage and handling? Please visit our **frequently asked questions (FAQ) page** for more details. |
| **Source** | Synthetic |

## Applications

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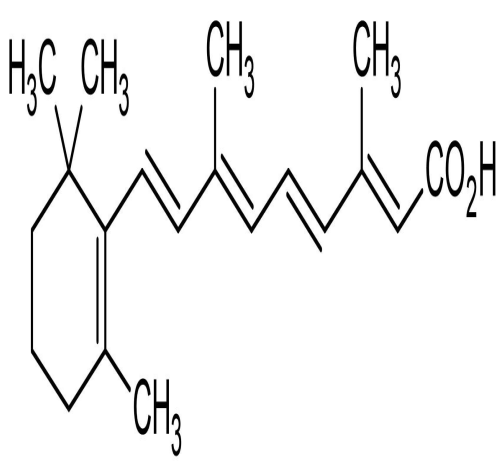
|---|---|
| **The Abpromise guarantee** | Our **Abpromise guarantee** covers the use of ab120728 in the following tested applications. |

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

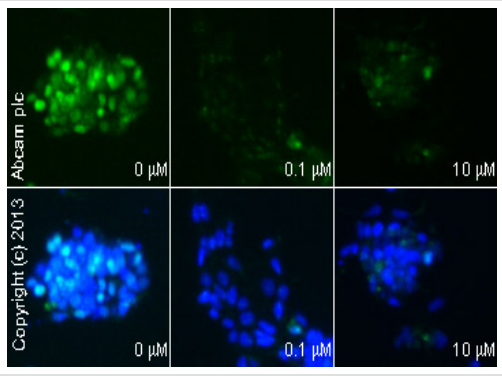
| Application | Abreviews | Notes |
|---|---|---|
| **Functional Studies** | | Use at an assay dependent concentration. |

## Images




Chemical Structure - trans-Retinoic acid, Stem cell differentiator (ab120728)

2D chemical structure image of ab120728, trans-Retinoic acid, Stem cell differentiator




Immunocytochemistry/ Immunofluorescence - trans-Retinoic acid, Stem cell differentiator (ab120728)

**ab19857** staining Oct4 in F9 cells treated with trans-retinoic acid (ab120728), by ICC/IF. Decrease of Oct4 expression correlates with increased concentration of trans-retinoic acid, as described in literature.
The cells were incubated at 37°C for 2 days in media containing different concentrations of ab120728 (trans-retinoic acid) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature 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 **ab19857** (1 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.



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