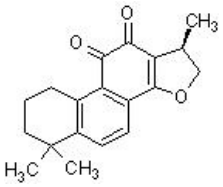
abcam

Product datasheet

Cryptotanshinone, STAT3 inhibitor ab120666

1 References 2 Images

Overview

Product name	Cryptotanshinone, STAT3 inhibitor
Description	STAT3 inhibitor with diverse biological activities
Biological description	STAT3 inhibitor (IC_{50} = 4.6 µM). Cell-permeable, naturally occuring constitutent of *Salvia miltiorrhiza* with diverse biological activities. Shows anticancer, antibacterial, anti-inflammatory, antidiabetes and antiobesity activity. Attenuates amyloid plaque deposition in the brain.
Purity	> 95%
CAS Number	35825-57-1
Chemical structure	

Properties

Chemical name	(*R*)-(-)-1,6,6-Trimethyl-1,2,6,7,8,9-hexahydrophenanthro[1,2-*b*]furan-10,11-dione
Molecular weight	296.37
Molecular formula	$C_{19}H_{20}O_3$
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.
Solubility overview	Soluble in DMSO 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. Toxic, refer to SDS for further information. Need more advice on solubility, usage and handling? Please visit our **frequently asked questions (FAQ) page** for more details.
Source	*Salvia miltiorrhiza*

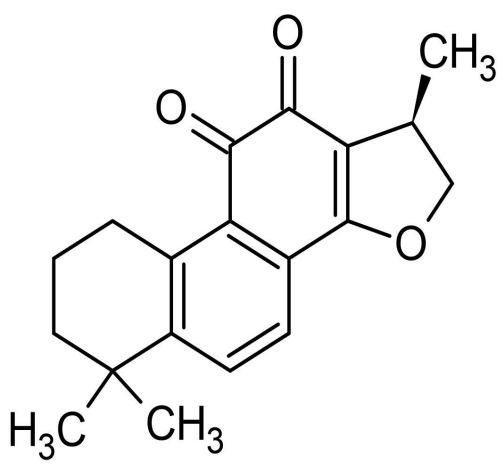
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab120666 in the following tested applications.

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

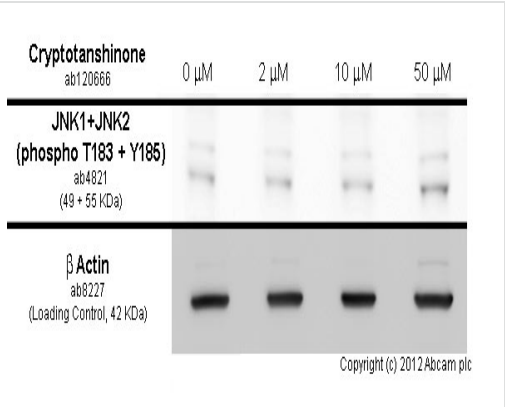
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - Cryptotanshinone, STAT3 inhibitor (ab120666)

2D chemical structure image of ab120666, Cryptotanshinone, STAT3 inhibitor



Functional Studies - Cryptotanshinone, STAT3 inhibitor (ab120666)

MCF7 cells were incubated at 37°C for 4h with vehicle control (0 µM) and different concentrations of cryptotanshinone (ab120666). Increased expression of JNK1+JNK2 (phospho T183 + Y185) in MCF7cells correlates with an increase in cryptotanshinone concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with **ab4821** at at 1/1000 dilution and **ab8227** at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 dilution and visualised using ECL development solution.

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