

Product datasheet

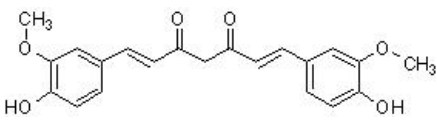
Curcumin (Diferuloylmethane), Lipoxygenase inhibitor ab120618

1 References 1 Image

Overview

Product name	Curcumin (Diferuloylmethane), Lipoxygenase inhibitor
Description	Flavonoid. Lipoxygenase inhibitor. Antioxidant, anti-inflammatory agent.
Biological description	Flavonoid derived from <i>Curcuma longa</i> plant. Potent antioxidant, anti-inflammatory, analgesic and anticancer agent. Lipoxygenase and cyclooxygenase inhibitor (IC ₅₀ values are 8 and 52 μM, respectively). Blood-brain barrier permeable. Shows diverse range of actions including free radical scavenging activity <i>in vitro</i> and <i>in vivo</i> , cardio and neuroprotective effects.

Properties

Chemical name	(1E,6E)-1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione
Molecular weight	368.38
Chemical structure	
Molecular formula	C ₂₁ H ₂₀ O ₆
CAS Number	458-37-7
PubChem identifier	969516
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in ethanol to 10 mM and in DMSO to 10 mM
Handling	<p>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.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>
SMILES	<chem>COC1=C(C=CC(=C1)C=CC(=O)CC(=O)C=CC2=CC(=C(C=C2)O)OC)O</chem>
Source	Synthetic

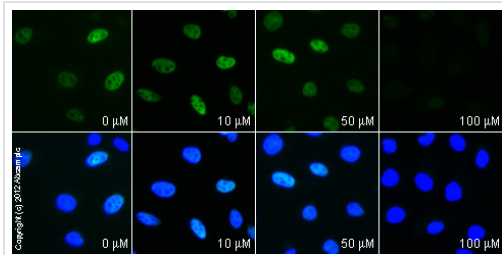
Applications

Our [Abpromise guarantee](#) covers the use of **ab120618** 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



Functional Studies-Curcumin (Diferuloylmethane)
(ab120618)

[ab32137](#) staining c-Jun in HeLa cells treated with curcumin (diferuloylmethane) (ab120618), by ICC/IF. Decrease in c-Jun expression correlates with increased concentration of curcumin (diferuloylmethane) as described in literature.

The cells were incubated at 37°C for 4h in media containing different concentrations of ab120618 (curcumin (diferuloylmethane)) 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 [ab32137](#) (1/100 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat 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.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"

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