

Product Name: DFB

Catalog No.: 1625

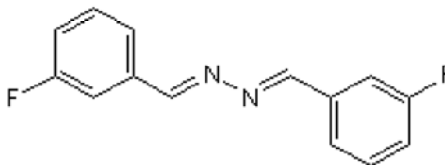
Batch No.: 1

CAS Number: 15332-10-2

IUPAC Name: [(3-Fluorophenyl)methylene]hydrazone-3-fluorobenzaldehyde

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₀F₂N₂
Batch Molecular Weight: 244.24
Physical Appearance: Yellow solid
Solubility: ethanol to 10 mM
 DMSO to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.53 (Diethyl ether:Petroleum ether [1:9])
Melting Point: Between 139 - 141°C
HPLC: Shows 98.7% purity
¹H NMR: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	68.85	4.13	11.47
Found	68.78	4.09	11.41

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Novel allosteric potentiator of the metabotropic glutamate receptor mGlu₅. Devoid of agonist activity itself, but potentiates (3 - 6-fold) the action of agonists at mGlu₅ without any effect at other mGlu subtypes (EC₅₀ for potentiation = 2 - 5.3 μM).

Physical and Chemical Properties:

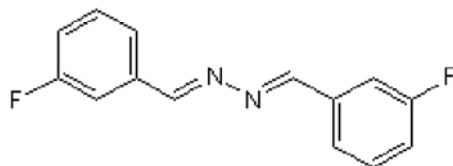
Batch Molecular Formula: C₁₄H₁₀F₂N₂

Batch Molecular Weight: 244.24

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

ethanol to 10 mM

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Zhang *et al* (2005) Allosteric potentiators of metabotropic glutamate receptor subtype 5 have differential effects on different signaling pathways in cortical astrocytes. *J.Pharmacol.Exp.Ther.* **315** 1212. PMID: 16135701.

O'Brien *et al* (2003) A family of highly selective allosteric modulators of the metabotropic glutamate receptor subtype 5. *Mol.Pharmacol.* **64** 731. PMID: 12920211.

Williams *et al* (2002) DFB, an allosteric potentiator of mGluR5 4th International Meeting on Metabotropic Glutamat.

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