



Certificate of Analysis

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4-IBP **Product Name:** Catalog No.: 0748 Batch No.: 1

CAS Number: 155798-08-6

IUPAC Name: N-(N-Benzylpiperidin-4-yl)-4-iodobenzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

C₁₉H₂₁IN₂O **Batch Molecular Formula: Batch Molecular Weight:** 420.29

Physical Appearance: White crystalline solid Solubility:

DMSO to 10 mM ethanol to 5 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

Melting Point: Between 199 - 202°C HPLC: Shows 100% purity ¹H NMR: Consistent with structure

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Product Information

Print Date: Apr 16th 2020

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CAS Number: 155798-08-6

IUPAC Name: N-(N-Benzylpiperidin-4-yl)-4-iodobenzamide

Description:

Combines high affinity for σ_1 and moderate affinity for σ_2 sites. Centrally active following systemic administration in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{19}H_{21}IN_2O$ Batch Molecular Weight: 420.29

Physical Appearance: White crystalline solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 10 mM ethanol to 5 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:

Bermack and Debonnel (2001) Modulation of serotonergic neurotransmission by short- and long-term treatments with sigma ligands Br.J.Pharmacol. *134* 691. PMID: 11588125.

Whittemore et al (1997) Antagonism of N-MthD.-aspartate receptors by σ site ligands: potency, subtype-selectivity and mechanisms of inhibition. J.Pharmacol.Exp.Ther. **282** 326. PMID: 9223571.

John et al (1994) Synthesis and characterisation of [125I]-N-(N-benzylpiperidin-4-yl)-4-iodobenzamide, a new sigma receptor radiopharmaceutical: high affinity binding to MCF-7 breast tumor cells. J.Med.Chem. **37** 1737. PMID: 8021913.

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