TOCRIS
a bio-techne brand

Print Date: Jan 16th 2016

Certificate of Analysis

www.tocris.com

Product Name: **DG 172 dihydrochloride** **Catalog No.: 5566** **Batch No.: 1**

CAS Number: 1361504-77-9

IUPAC Name: (αZ)-2-Bromo-α-[[4-(4-methyl-1-piperazinyl)phenyl]methylene]benzeneacetonitrile dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{20}BrN_3.2HCl$

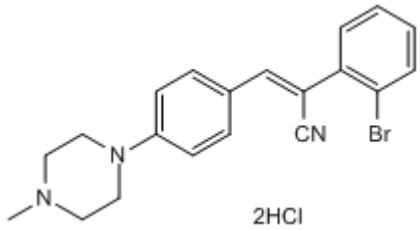
Batch Molecular Weight: 455.22

Physical Appearance: Pale yellow solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.52 (Dichloromethane:Methanol [95:5])

HPLC: Shows >99.1% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	52.77	4.87	9.23
Found	52.84	4.91	9.22

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **DG 172 dihydrochloride** **Catalog No.: 5566** **Batch No.: 1**

CAS Number: 1361504-77-9

IUPAC Name: (α*Z*)-2-Bromo-α-[[4-(4-methyl-1-piperazinyl)phenyl]methylene]benzeneacetonitrile dihydrochloride

Description:

Potent PPARβ/δ inverse agonist (IC_{50} = 26.9 nM). Inhibits Angptl4 gene expression in mouse myoblasts (IC_{50} = 9.5 nM) in vitro. Also augments GM-CSF/IL-4-induced differentiation of mature dendritic cells from bone marrow cells in culture. Orally available.

Physical and Chemical Properties:

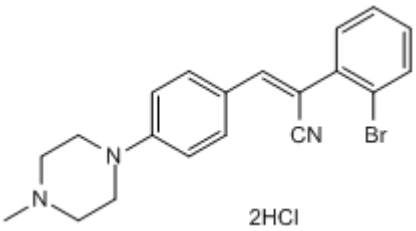
Batch Molecular Formula: $C_{20}H_{20}BrN_3.2HCl$

Batch Molecular Weight: 455.22

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM
DMSO to 100 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:

Lieber *et al* (2012) (*Z*)-2-(2-bromophenyl)-3-{[4-(1-methyl-piperazine)amino]phenyl}acrylonitrile (DG172): an orally bioavailable PPARβ/δ-selective ligand with inverse agonistic properties. J.Med.Chem. ***55*** 2858. PMID: 22369181.

Lieber *et al* (2015) The inverse agonist DG172 triggers a PPARβ/δ-independent myeloid lineage shift and promotes GM-CSF/IL-4-induced dendritic cell differentiation. Mol.Pharmacol. ***87*** 162. PMID: 25398837.

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956