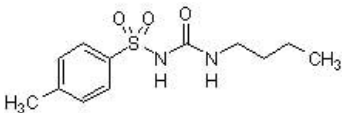


Product datasheet

Tolbutamide, K⁺ channel blocker ab120278

[1 References](#) [2 Images](#)

Overview

Product name	Tolbutamide, K ⁺ channel blocker
Description	K ⁺ channel blocker
Biological description	Blocker of ATP-sensitive (KIR6.x) inward rectifier K ⁺ channels.
CAS Number	64-77-7
Chemical structure	

Properties

Chemical name	1-Butyl-3-tosylurea
Molecular weight	270.35
Molecular formula	C ₁₂ H ₁₈ N ₂ O ₃ S
PubChem identifier	5505
Storage instructions	Store at Room Temperature. The product can be stored for up to 12 months.
Solubility overview	Soluble in DMSO to 100 mM and in ethanol to 100 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>Refer to SDS for further information.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>
SMILES	<chem>Cc1ccc(cc1)S(=O)(=O)NC(=O)NCCCC</chem>
Source	Synthetic

Applications

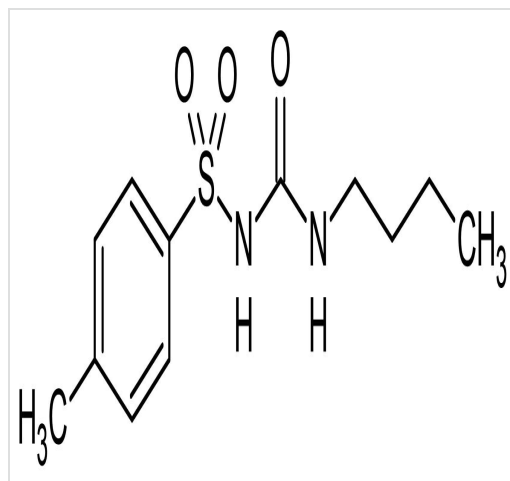
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120278 in the following tested applications.

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

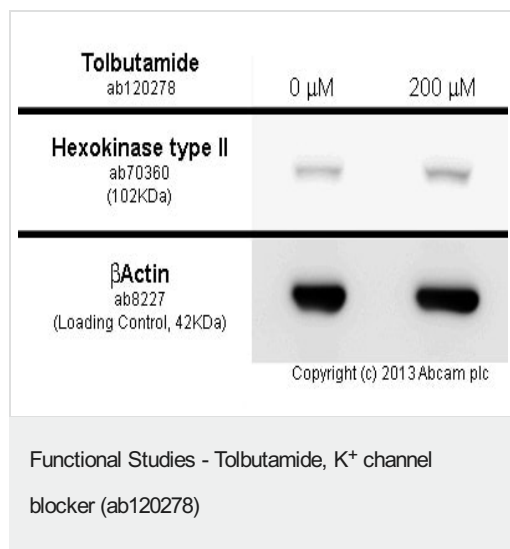
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - Tolbutamide, K⁺ channel blocker (ab120278)

2D chemical structure image of ab120278, Tolbutamide, K⁺ channel blocker



Functional Studies - Tolbutamide, K⁺ channel blocker (ab120278)

U-87 MG cells were incubated at 37°C for 30 minutes with vehicle control (0 μM) and 200 μM of tolbutamide (ab120278) in DMSO. Increased expression of hexokinase type II (**ab70360**) correlates with an increase in tolbutamide 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 **ab70360** at 2 μg/ml 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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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