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# **DATASHEET**

Dexmedetomidine hydrochloride

### **Product overview**

Name Dexmedetomidine hydrochloride

Cat No HB2686

Alternative names d-Medetomidine hydrochloride

**Biological action** Agonist >99%

**Description** Potent, highly selective α2 adrenoceptor agonist.

## **Biological Data**

Biological description Potent, highly selective α2 adrenoceptor agonist (K<sub>i</sub> values are 1.08 and 1750 nM at α2 and α1

receptors, respectively). Active isomer of medetomidine. Shows greater selectivity for a1-adrenoceptors than clonidine and UK14304. Shows various actions such as hypotensive,

bradycardic, anxiolytic, hypothermic, sedative and analgesic properties.

## Solubility & Handling

**Solubility overview** Soluble in water (100 mM), and in DMSO (100 mM)

Storage instructions -20°

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Shipping Conditions Stable for ambient temperature shipping. Follow storage instructions on receipt.

Important This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

### **Chemical Data**

Chemical name Molecular Weight Chemical structure 4-[(1S)-1-(2,3-Dimethylphenyl)ethyl]-1H-imidazole hydrochloride

H<sub>S</sub>C CH<sub>S</sub>

Molecular Formula C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>.HCl CAS Number 145108-58-3 PubChem identifier 6918081

SMILES CC1=C(C(=CC=C1)[C@H](C)C2=CN=CN2)C.CI

InChl=1S/C13H16N2.CIH/c1-9-5-4-6-12(10(9)2)11(3)13-7-14-8-15-13;/h4-8,11H,1-3H3,(H,14,15);1H

/t11-;/m0./s1

InChiKey VPNGEIHDPSLNMU-MERQFXBCSA-N

Appearance White solid