

## DATASHEET

### 6-Hydroxydopamine (6-OHDA) hydrobromide

#### Product overview

<b>Name</b>	6-Hydroxydopamine (6-OHDA) hydrobromide
<b>Cat No</b>	HB1889
<b>Description</b>	Neurotoxin, widely used to produce the 6-OHDA Parkinson's disease model
<b>Alternative names</b>	6-OHDA, Oxidopamine
<b>Biological action</b>	Toxin
<b>Purity</b>	>98%

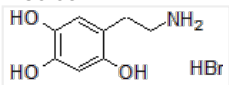
#### Biological Data

<b>Biological description</b>	<p>6-hydroxydopamine hydrobromide (6-OHDA) is widely used to lesion the nigrostriatal dopaminergic system as a model of Parkinson's disease (6-OHDA lesion model).</p> <p>6-OHDA is commonly unilaterally administered into the medial forebrain bundle (MFB), substantia nigra or striatum to induce a selective depletion of dopamine neurons to reproduce behavioural deficits seen in Parkinson's disease. Varying degrees of neurodegeneration occur depending on site of administration.</p> <p>Unilateral administration of 6-OHDA into one hemisphere (hemiparkinsonian model) permits assessment of a quantifiable turning behaviour which can be correlated with the magnitude of the nigrostriatal lesions. Bilateral 6-OHDA lesion models may also be used.</p>
-------------------------------	---

#### Solubility & Handling

<b>Storage instructions</b>	-20 °C
<b>Solubility overview</b>	Soluble in water (100 mM) and in DMSO (100 mM)
<b>Handling</b>	This compound is very air and light sensitive; exposure to air/light may affect compound performance. We therefore recommend storing the solid material at -20 °C in a sealed jar, in the dark and protect from light. As the compound is hygroscopic, desiccate if possible.
<b>Important</b>	Do not store the material in solution; make up solutions and use immediately. Protect from light. Solutions can be prepared using oxygen free water containing 0.1% sodium metabisulfite. This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

#### Chemical Data

<b>Chemical name</b>	5-(2-Aminoethyl)-1,2,4-benzenetriol hydrobromide
<b>Molecular Weight</b>	250.09
<b>Chemical structure</b>	
<b>Molecular Formula</b>	C <sub>8</sub> H <sub>11</sub> NO <sub>3</sub> · HBr
<b>CAS Number</b>	636-00-0
<b>PubChem identifier</b>	176170
<b>SMILES</b>	C1=C(C(=CC(=C1O)O)O)CCN.Br
<b>InChi</b>	InChI=1S/C8H11NO3.BrH/c9-2-1-5-3-7(11)8(12)4-6(5)10;/h3-4,10-12H,1-2,9H2;1H

**InChiKey**  
**MDL number**  
**Appearance**

MLACDGUOKDOLGC-UHFFFAOYSA-N  
MFCD00012894  
Off-white to brown solid

---

## References

### **A guide to neurotoxic animal models of Parkinson's disease.**

Tieu K (2011) Cold Spring Harb Perspect Med 1(1)

### **Unilateral Lesion of Dopamine Neurons Induces Grooming Asymmetry in the Mouse.**

Pelosi et al (2015) PLoS One 10(9)

**PubMedID** [26397369](#)

### **Limitations of animal models of Parkinson's disease.**

Potashkin et al (2010) Parkinsons Dis 2011:658083

**PubMedID** [21209719](#)

### **Behavioral characterization of a unilateral 6-OHDA-lesion model of Parkinson's disease in mice.**

Iancu et al (2005) Behav Brain Res. 162(1)

**PubMedID** [15922062](#)

---