

## Product Data Sheet

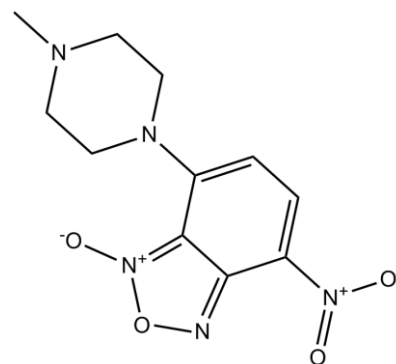
### Chemical Properties

**Product Name:** NSC 207895 (XI-006)

**Cas No.:** 58131-57-0

**M.Wt:** 279.25

**Formula:** C<sub>11</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub>



**Chemical Name:** 4-(4-methylpiperazin-1-yl)-7-nitro-3-oxido-2,1,3-benzoxadiazol-3-ium

**Canonical SMILES:** CN1CCN(CC1)C2=CC=C(C3=NO[N+](=C23)[O-])[N+](=O)[O-]

**Solubility:** Limited solubility

**Storage:** Store at -20°C

**General tips:** For obtaining a higher solubility, please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

**Shopping Condition:** Evaluation sample solution : ship with blue ice  
All other available size: ship with RT, or blue ice upon request

### Biological Activity

**Targets :** Apoptosis

**Pathways:** MDM2

#### Description:

NSC 207895 is a small-molecule inhibitor of MDMX with GI50 value of 117nM [1]. NSC 207895 is a benzofuroxan derivative and is less toxic. NSC 207895 decreases the activity of MDMX promoter and subsequently decreases both the mRNA and protein levels of MDMX in MCF-7 cells. This inhibition of MDMX is accompanied with the activation of p53. NSC 207895 induces apoptosis in MCF-7 cells since it induces pro-apoptotic gene expression. It is found that

the cleavage of PARP is significantly induced by NSC 207895 [2].

NSC 207895 is also found to be a DNA-damaging agent. It shows strong functional interactions with both DNA repair and replication fork complexes. NSC 207895 activates the DNA damage response (DDR) and leads a delay in cell cycle progression [3].

**Reference:**

[1] Hawes JJ, Nerva JD, Reilly KM. Novel dual-reporter preclinical screen for antiastrocytoma agents identifies cytostatic and cytotoxic compounds. *J Biomol Screen*. 2008 Sep;13(8):795-803.

[2] Wang H, Ma X, Ren S, Buolamwini JK, Yan C. A small-molecule inhibitor of MDMX activates p53 and induces apoptosis. *Mol Cancer Ther*. 2011 Jan;10(1):69-79.

[3] Kapitzky L, Beltrao P, Berens TJ, Gassner N, Zhou C, Wüster A, Wu J, Babu MM, Elledge SJ, Toczyski D, Lokey RS, Krogan NJ. Cross-species chemogenomic profiling reveals evolutionarily conserved drug mode of action. *Mol Syst Biol*. 2010 Dec 21;6:451.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

**ApexBio Technology**

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