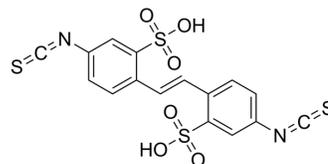


## DIDS

<b>Cat. No.:</b>	HY-121693
<b>CAS No.:</b>	53005-05-3
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>10</sub> N <sub>2</sub> O <sub>6</sub> S <sub>4</sub>
<b>Molecular Weight:</b>	454.52
<b>Target:</b>	RAD51
<b>Pathway:</b>	Cell Cycle/DNA Damage
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

<b>Description</b>	DIDS is a potent RAD51 inhibitor. DIDS inhibits the RAD51-mediated homologous pairing and strand-exchange reactions. DIDS inhibits anion exchange and binding to the red blood cell membrane <sup>[1][2]</sup> .
<b>In Vitro</b>	DIDS (0-10 μM) inhibits RAD51-mediated strand exchange <sup>[1]</sup> . DIDS (0-20 μM) inhibits DNA binding by RAD51 <sup>[1]</sup> . DIDS (10 μM; 0-60 min) stimulates the ATP hydrolyzing activity of RAD51 in the absence of DNA <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Adv Sci (Weinh). 2021 Nov;8(21):e2101936.
- Autophagy. 2021 Nov;17(11):3592-3606.
- Life Sci. 2020 Oct 15;259:118390.
- Cancer Sci. 2020 Nov;111(11):4288-4302.
- J Cell Mol Med. 2021 May 5.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Ishida T, et, al. DIDS, a chemical compound that inhibits RAD51-mediated homologous pairing and strand exchange. Nucleic Acids Res. 2009 Jun;37(10):3367-76.
- [2]. Lepke S, et, al. A study of the relationship between inhibition of anion exchange and binding to the red blood cell membrane of 4,4'-diisothiocyanostilbene-2,2'-disulfonic acid (DIDS) and its dihydro derivative (H2DIDS). J Membr Biol. 1976 Oct 20;29(1-2):147-77.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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