

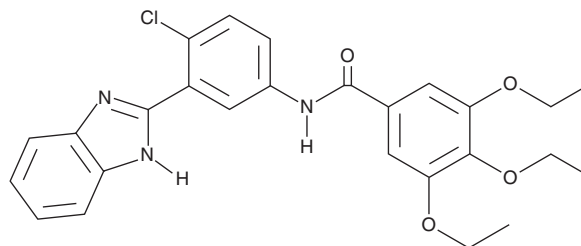
# PRODUCT INFORMATION



## SANT-2

Item No. 21208

**CAS Registry No.:** 329196-48-7  
**Formal Name:** N-[3-(1H-benzimidazol-2-yl)-4-chlorophenyl]-3,4,5-triethoxy-benzamide  
**MF:** C<sub>26</sub>H<sub>26</sub>ClN<sub>3</sub>O<sub>4</sub>  
**FW:** 480.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 289 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

SANT-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the SANT-2 in the solvent of choice, which should be purged with an inert gas. SANT-2 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SANT-2 in these solvents is approximately 30 mg/ml.

SANT-2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SANT-2 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SANT-2 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

SANT-2 is a Smoothened (Smo) receptor antagonist.<sup>1,2</sup> It binds to the Smo receptor ( $K_d = 12$  nM) and inhibits binding of the Smo receptor agonist SAG-1.3 (SAG; Item No. 11914) and antagonist cyclopamine (Item No. 11321) ( $K_s = 7.8$  and  $8.4$  nM, respectively). SANT-2 inhibits hedgehog signaling induced by an N-terminal fragment of sonic hedgehog (Shh) in an Shh-LIGHT2 cellular assay ( $IC_{50} = 30$  nM).<sup>1</sup>

### References

1. Chen, J.K., Taipale, J., Young, K.E., *et al.* Small molecule modulation of smoothened activity. *Proc. Natl. Acad. Sci. USA* **99(22)**, 14071-14076 (2002).
2. Rominger, C.M., Bee, W.L.T., Copeland, R.A., *et al.* Evidence for allosteric interactions of antagonist binding to the smoothened receptor. *J. Pharmacol. Exp. Ther.* **329(3)**, 995-1005 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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