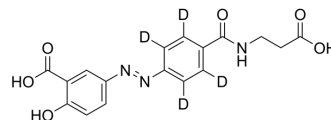


## Balsalazide-d<sub>4</sub>

<b>Cat. No.:</b>	HY-B0667S1
<b>CAS No.:</b>	2714315-25-8
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>11</sub> D <sub>4</sub> N <sub>3</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	361.34
<b>Target:</b>	Interleukin Related; STAT; Isotope-Labeled Compounds
<b>Pathway:</b>	Immunology/Inflammation; JAK/STAT Signaling; Stem Cell/Wnt; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Balsalazide-d <sub>4</sub> is deuterium labeled Balsalazide. Balsalazide could suppress colitis-associated carcinogenesis through modulation of IL-6/STAT3 pathway.
<b>IC<sub>50</sub> &amp; Target</b>	IL-6
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Do EJ, et al. Suppression of colitis-associated carcinogenesis through modulation of IL-6/STAT3 pathway by balsalazide and VSL#3. *J Gastroenterol Hepatol.* 2016 Aug;31(8):1453-61.
- [3]. Kruis W, et al. Low dose balsalazide (1.5 g twice daily) and mesalazine (0.5 g three times daily) maintained remission of ulcerative colitis but high dose balsalazide (3.0 g twice daily) was superior in preventing relapses. *Gut.* 2001. 49(6): p. 783-789.

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

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