

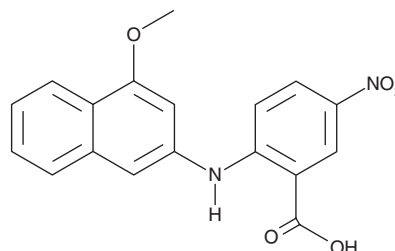
# PRODUCT INFORMATION



## MONNA

Item No. 21917

**CAS Registry No.:** 1572936-83-4  
**Formal Name:** 2-[[4-methoxy-2-naphthalenyl) amino]-5-nitro-benzoic acid  
**MF:** C<sub>18</sub>H<sub>14</sub>N<sub>2</sub>O<sub>5</sub>  
**FW:** 338.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 214, 264, 295, 376 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

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

MONNA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MONNA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MONNA has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

MONNA is a selective inhibitor of anoctamin-1 (ANO1; IC<sub>50</sub> = 0.08 μM in *Xenopus* oocytes), a calcium-activated chloride channel (CaCC).<sup>1</sup> It is selective for ANO1 over the chloride channels bestrophin-1, chloride channel protein 2, and cystic fibrosis transmembrane conductance regulator up to 10 μM. MONNA (10 μM) induces full vasorelaxation of precontracted mouse isolated mesenteric arteries in the presence or absence of chloride.<sup>2</sup> It also hyperpolarizes isolated rat mesenteric arteries under resting conditions.

### References

1. Oh, S. J., Hwang, S.J., Jung, J.E., *et al.* MONNA, a potent and selective blocker for transmembrane protein with unknown function 16/anoctamin-1. *Mol. Pharmacol.* **84**(5), 726-735 (2013).
2. Boedtjker, D.M.B., Kim, S., Jensen, A.B., *et al.* New selective inhibitors of calcium-activated chloride channels - T16A<sub>inh</sub>-A01, CaCC<sub>inh</sub>-A01 and MONNA - what do they inhibit? *Br. J. Pharmacol.* **172**(16), 4158-4172 (2015).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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