# PRODUCT INFORMATION



## 852A

Item No. 39512

CAS Registry No.: 532959-63-0

N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c] Formal Name:

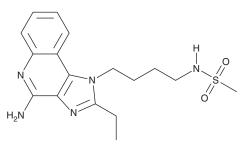
quinolin-1-yl)butyl]-methanesulfonamide

Synonym: PF-4878691

MF:  $C_{17}H_{23}N_5O_2S$ 

FW: 361.5 ≥98% **Purity:** Supplied as: A 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**

852A is supplied as a solid. A stock solution may be made by dissolving the 852A in the solvent of choice, which should be purged with an inert gas. 852A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 852A in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 852A can be prepared by directly dissolving the solid in aqueous buffers. 852A is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

## Description

852A is a toll-like receptor 7 (TLR7) agonist. It selectively induces NF-κB signaling in HEK293 cells expressing recombinant human TLR7 but not HEK293 cells expressing recombinant human TLR8 or TLR9 when used at a concentration of 1 μM. 852A (10-1,000 ng/ml) also induces IFN-α production in plasmacytoid dendritic cell-enriched but not plasmacytoid dendritic cell-depleted isolated human peripheral blood mononuclear cells (PBMCs). In vivo, 852A (150 mg/kg) delays the onset of lung metastasis in a B16/F10 murine melanoma model.<sup>2</sup>

#### References

- 1. A.Z., D., C., Y., L.I., H., et al. First in human phase I trial of 852A, a novel systemic toll-like receptor 7 agonist, to activate innate immune responses in patients with advanced cancer. Clin. Cancer Res. 13(23), 7119-7125 (2007).
- 2. J.R., I., C.D., D., S.S., A., et al. TLR7 agonist 852A inhibition of tumor cell proliferation is dependent on plasmacytoid dendritic cells and type I IFN. J. Interferon Cytokine Res. 28(4), 253-263 (2008).

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

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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