

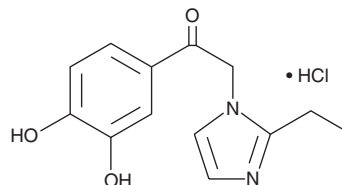
# PRODUCT INFORMATION



## ML-095 (hydrochloride)

Item No. 15173

**CAS Registry No.:** 1135318-57-8  
**Formal Name:** 1-(3,4-dihydroxyphenyl)-2-(2-ethyl-1H-imidazol-1-yl)-ethanone, monohydrochloride  
**Synonym:** CID-25067483  
**MF:** C<sub>13</sub>H<sub>14</sub>N<sub>2</sub>O<sub>3</sub> • HCl  
**FW:** 282.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 235, 283, 316 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

ML-095 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-095 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ML-095 (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

### Description

Alkaline phosphatases catalyze the hydrolysis of phosphate groups from many types of molecules, including nucleotides, proteins, and alkaloids. Three isozymes of alkaline phosphatases have been identified in humans, two of which are tissue-specific placental alkaline phosphatase (PLAP), intestinal alkaline phosphatase (IAP), and tissue non-specific alkaline phosphatase (TNAP). While the biological function of PLAP is unknown, PLAP-like enzymes have been detected in the serum of patients with primary testicular tumors and other cancers.<sup>1</sup> ML-095 is an inhibitor of PLAP (IC<sub>50</sub> = 3.7 μM) that demonstrates high selectivity against the related alkaline phosphatases, TNAP and IAP (IC<sub>50</sub>s > 100 μM).<sup>1</sup>

### Reference

1. Lanier, M., Cashman, J., Sergienko, E., *et al.* Placental alkaline phosphatase (PLAP) luminescent HTS assay. In: Probe Reports from the NIH Molecular Libraries Program [Internet]. Bethesda (MD): National Center for Biotechnology Information (2009). Available from: <https://www.ncbi.nlm.nih.gov/books/NBK47343/>

**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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