

## Catalog # 10-1185 ISO-1

CAS# 478336-92-4

(S,R)-3-(4-Hydroxyphenyl)-4,5-dihydro-5-isoxazole acetic acid, methyl ester Lot # X102901

Antagonist of macrophage migration inhibitory factor (MIF, a pro-inflammatory cytokine). Displays antiinflammatory activity. Increases survival in severe sepsis<sup>1</sup>. Inhibits airway remodeling in mouse asthma model<sup>2</sup>. Blocks MIF-induced autophagy<sup>3</sup>. Active in cellular and mouse models.

- 1) Al-Abed et al. (2005), ISO-1 binding to the tautomerase active site of MIF inhibits its pro-inflammatory activity and increases survival in severe sepsis; J. Biol. Chem., **280** 36541
- 2) Chen et al. (2010), ISO-1, a macrophage migration inhibitory factor antagonist, inhibits airway remodeling in a murine model of chronic asthma; Mol. Med., **16** 400
- 3) Chuang et al. (2012), Macrophage migration inhibitory factor induces autophagy via reactive oxygen species generation; PLoS One, **7** e37613

## **PHYSICAL DATA**

 $\begin{array}{ll} \mbox{Molecular Weight:} & 235.24 \\ \mbox{Molecular Formula:} & C_{12}\mbox{H}_{13}\mbox{NO}_4 \\ \mbox{Purity:} & 98\% \mbox{ by HPLC} \end{array}$ 

NMR: (Conforms)

Solubility: DMSO (up to 25 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may

be stored at -20°C for up to 2 months

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