# PRODUCT INFORMATION



## Velaresol

Item No. 37190

CAS Registry No.: 77858-21-0

Formal Name: 5-(2-formyl-3-hydroxyphenoxy)-

pentanoic acid

Synonyms: BW 12C, BW 12C79

MF:  $C_{12}H_{14}O_{5}$ FW: 238.2 **Purity:** ≥98% 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**

Velaresol is supplied as a solid. A stock solution may be made by dissolving the velaresol in the solvent of choice, which should be purged with an inert gas. Velaresol is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of velaresol in these solvents is approximately 10 and 16 mg/ml, respectively. Velaresol is slightly soluble in ethanol.

#### Description

Velaresol is an oxyhemoglobin (Hb-O<sub>2</sub>) stabilizer.<sup>1</sup> It increases erythrocyte deformability in isolated human blood from a patient with sickle cell disease when used at a concentration of 1.5 mM. Velaresol (3 or 5 mM) inhibits deoxygenation-induced decreases in erythrocyte deformability in isolated human blood from a patient with sickle cell disease. It decreases oxygen tension and increases oxygen saturation of isolated human sickle erythrocytes when used at a concentration of 5 mM.<sup>2</sup>

#### References

- 1. Kenny, M.W. and Stuart, J. Preservation of deformability (filterability) of sickle cells by BW12C during progressive deoxygenation. Br. J. Haematol. 55(3), 465-471 (1983).
- 2. Gibson, J.S., Khan, A., Speake, P.F., et al. O2 dependence of K+ transport in sickle cells: The effect of different cell populations and the substituted benzaldehyde 12C79. FASEB J. 15(3), 823-832 (2001).

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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