

GBT-440

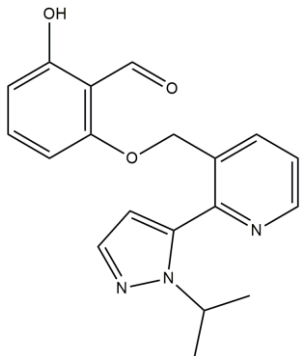
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ALTERNATE NAMES:

Voxelotor; Hemoglobin Modulators-1; 2-hydroxy-6-[[2-(2-propan-2-ylpyrazol-3-yl)pyridin-3-yl]methoxy]benzaldehyde; 2-hydroxy-6-((2-(1-isopropyl-1H-pyrazol-5-yl)pyridin-3-yl)methoxy)benzaldehyde; 2-hydroxy-6-((2-(1-(propan-2-yl)-1H-pyrazol-5-yl)pyridin-3-yl)methoxy)benzaldehyde; Benzaldehyde, 2-hydroxy-6-((2-(1-(1-methylethyl)-1H-pyrazol-5-yl)-3-pyridinyl)methoxy)-

CATALOG #:

B3031-5 5 mg
 B3031-25 25 mg

STRUCTURE:

MOLECULAR FORMULA:
 $C_{19}H_{19}N_3O_3$
MOLECULAR WEIGHT:

337.37

CAS NUMBER:

1446321-46-5

APPEARANCE:

White to off-white solid powder

PURITY:

≥98%

SOLUBILITY:

~20 mg/ml in ethanol
 ~33 mg/ml in DMSO and DMF

DESCRIPTION:

GBT-440 is a modulator of sickle hemoglobin S (HbS). It binds to the N-terminal valine of one of the haemoglobin α chains and increases HbS affinity for oxygen. GBT440 dose-dependently increases HbS affinity for oxygen ($EC_{50} = 8.2 \mu M$) for purified HbS and ($EC_{50} = 415 \mu M$) for whole blood from sickle cell disease (SCD) patients. It delays *in vitro* HbS polymerization and prevents sickling of RBCs. In a murine model of SCD, GBT-440 (100 and 150 mg/kg for 9-12 d) increases the half-life of RBCs, reduces reticulocyte counts and prevents *ex vivo* RBC sickling.

STORAGE TEMPERATURE:

-20°C. Protect from air. Store under desiccating conditions.

HANDLING:

Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCE:

Oksenberg, D., Dufu, K., Patel, M.P., et al. GBT440 increases haemoglobin oxygen affinity, reduces sickling and prolongs RBC half-life in a murine model of sickle cell disease. *Br. J. Haematol.* 175(1), 141-153 (2016).

RELATED PRODUCTS:

Hemoglobin Colorimetric Assay Kit (Cat. No. K219)
 Hemoglobin (Human) ELISA Kit (Cat. No. E4738)
 K-7174 dihydrochloride (Cat. No. 9478)
 Senicapoc (Cat. No. B2390)
 FG-4592 (Cat. No. 9681)

DISCLAIMER:

FOR RESEARCH USE ONLY! Not to be used on humans.