### Lusutrombopag

**Item No. 26533**

**CAS Registry No.:** 1110766-97-6  
**Formal Name:** (2E)-3-[2,6-dichloro-4-[[4-[[3-[[1(S)-1-(hexyloxy)ethyl]-2-methoxyphenyl]-2-thiazolyl]amino]carbonyl]phenyl]-2-methyl-2-propenoic acid  
**MF:** C_{29}H_{32}Cl_{2}N_{2}O_{5}S  
**FW:** 591.5  
**Purity:** ≥98%  
**UV/Vis.:** λ_{max}: 218, 260, 322 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

Lusutrombopag is supplied as a crystalline solid. A stock solution may be made by dissolving the lusutrombopag in the solvent of choice. Lusutrombopag is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 30 mg/ml.

### Description

Lusutrombopag is an agonist of the thrombopoietin receptor.\(^1\) It induces proliferation of Ba/F3 cells expressing human MPL, the gene for the thrombopoietin receptor, with an EC_{50} value of 84 nM but not of those expressing mouse Mpl.\(^2\) Lusutrombopag (0.3-10 mg/kg per day) increases the number of circulating platelets in a transgenic mouse model expressing human MPL and increases the number of megakaryocytes in the bone marrow when administered at a dose of 10 mg/kg per day. Formulations containing lusutrombopag have been used in the treatment of thrombocytopenia in adult patients with chronic liver disease scheduled to undergo invasive procedures.

### References