

## Small Molecules

### Eltrombopag

Thrombopoietin receptor agonist

Catalog #100-0250  
100-0251

1 mg  
5 mg



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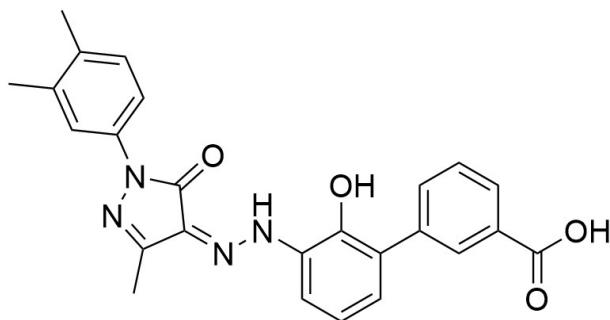
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## Product Description

Eltrombopag is a thrombopoietin receptor (TpoR) agonist ( $EC_{50} = 0.27 \mu\text{M}$  in a reporter assay) and an iron chelator (Erickson-Miller et al.). Interaction between Eltrombopag and TpoR triggers proliferation and differentiation of human bone marrow progenitor cells into megakaryocytes and increases platelet growth and production (Erickson-Miller et al.).

Molecular Name:	Eltrombopag
Alternative Names:	SB497115
CAS Number:	496775-61-2
Chemical Formula:	$C_{25}H_{22}N_4O_4$
Molecular Weight:	442.5 g/mol
Purity:	$\geq 98\%$
Chemical Name:	3'-[2-[(2Z)-1-(3,4-dimethylphenyl)-1,5-dihydro-3-methyl-5-oxo-4H-pyrazol-4-ylidene]hydrazinyl]-2'-hydroxy-[1,1'-biphenyl]-3-carboxylic acid

Structure:



## Properties

Physical Appearance:	A crystalline solid
Storage:	Product stable at $-20^{\circ}\text{C}$ as supplied. Protect from prolonged exposure to light. For long-term storage store with a desiccant. Stable as supplied for 12 months from date of receipt.
Solubility:	<ul style="list-style-type: none"><li>· DMSO <math>\leq 120 \text{ mM}</math></li><li>· Absolute ethanol <math>\leq 30 \text{ mM}</math></li></ul> For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 226 $\mu\text{L}$ of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at  $-20^{\circ}\text{C}$ . Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

## Published Applications

### DIFFERENTIATION

- Stimulates proliferation and differentiation of primary human CD34+ bone marrow cells into CD41+ megakaryocytes (Erickson-Miller et al.).

## References

Erickson-Miller CL et al. (2009) Preclinical activity of eltrombopag (SB-497115), an oral, nonpeptide thrombopoietin receptor agonist. *Stem Cells* 27(2): 424–30.

## Related Small Molecules

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**This product is hazardous. Please refer to the Safety Data Sheet (SDS).**

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