## PRODUCT INFORMATION

Toceranib
Item No. 17714

CAS Registry No.: 356068-94-5
Formal Name: $\quad 5$-[(Z)-(5-fluoro-1,2-dihydro-2-oxo-3H-indol-3-ylidene)methyl]-2,4-dimethyl-N-[2-(1-pyrrolidinyl) ethyl]-1H-pyrrole-3-carboxamide
Synonyms:
MF:
FW:
Purity:
HA 291639, SU11654

UV/Vis.:
Supplied as:
Storage:
$\mathrm{C}_{22} \mathrm{H}_{25} \mathrm{FN}_{4} \mathrm{O}_{2}$
396.5
$\geq 95 \%$
$\lambda_{\text {max }}: 267,430 \mathrm{~nm}$
A crystalline solid
$-20^{\circ} \mathrm{C}$


Stability: $\quad \geq 4$ years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

Toceranib is supplied as a crystalline solid. A stock solution may be made by dissolving the toceranib in the solvent of choice, which should be purged with an inert gas. Toceranib is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of toceranib in these solvents is approximately 0.5 and $0.25 \mathrm{mg} / \mathrm{ml}$, respectively.
Toceranib is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

## Description

Toceranib is a small molecule, multi-targeted receptor tyrosine kinase inhibitor that is structurally related to sunitinib (Item No. 13159). ${ }^{1}$ It potently inhibits signaling through VEGFR, FGFR, PDGFR, and Kit. ${ }^{1}$ Moveover, toceranib blocks the autophosphorylation of both wild type and mutant forms of Kit in response to stem cell factor, resulting in cell death. ${ }^{1}$ It is active in vivo and is commonly used against solid tumors in dogs. ${ }^{2,3}$

## References

1. Liao, A.T., Chien, M.B., Shenoy, N., et al. Inhibition of constitutively active forms of mutant kit by multitargeted indolinone tyrosine kinase inhibitors. Blood 100(2), 585-593 (2002).
2. London, C., Mathie, T., Stingle, N., et al. Preliminary evidence for biologic activity of toceranib phosphate (Palladia ${ }^{\circledR}$ ) in solid tumours. Vet. Comp. Oncol. 10(3), 194-205 (2012).
3. Ranieri, G., Gadaleta, C.D., Patruno, R., et al. A model of study for human cancer: Spontaneous occurring tumors in dogs. Biological features and translation for new anticancer therapies. Crit. Rev. Oncol. Hematol. 88, 187-197 (2013).

## WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFETY DATA

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.

