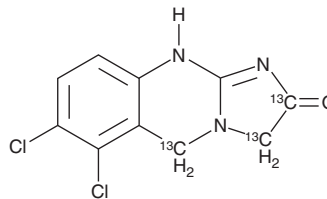


# PRODUCT INFORMATION



## Anagrelide-<sup>13</sup>C<sub>3</sub> Item No. 33280

<b>Formal Name:</b>	6,7-dichloro-5,10-dihydroimidazo[2,1-b]quinazolin-2(3H)-one-2,3,5- <sup>13</sup> C <sub>3</sub>
<b>Synonyms:</b>	BL 4162A- <sup>13</sup> C <sub>3</sub> , BMY 26538-01- <sup>13</sup> C <sub>3</sub>
<b>MF:</b>	C <sub>7</sub> [ <sup>13</sup> C] <sub>3</sub> H <sub>7</sub> Cl <sub>2</sub> N <sub>3</sub> O
<b>FW:</b>	259.1
<b>Purity:</b>	≥98%
<b>Supplied as:</b>	A solid
<b>Storage:</b>	-20°C
<b>Stability:</b>	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Anagrelide-<sup>13</sup>C<sub>3</sub> is supplied as a solid. A stock solution may be made by dissolving the anagrelide-<sup>13</sup>C<sub>3</sub> in the solvent of choice, which should be purged with an inert gas. Anagrelide-<sup>13</sup>C<sub>3</sub> is soluble in DMSO.

### Description

Anagrelide-<sup>13</sup>C<sub>3</sub> is intended for use as an internal standard for the quantification of anagrelide (Item No. 21411) by GC- or LC-MS. Anagrelide is an inhibitor of phosphodiesterase 3 (PDE3; IC<sub>50</sub> = 36 nM for the human platelet enzyme).<sup>1</sup> It inhibits thrombopoietin-induced megakaryocytopoiesis of isolated human CD34<sup>+</sup> progenitor cells (IC<sub>50</sub> = 26 nM).<sup>2</sup> Anagrelide reduces platelet aggregation induced by ADP, collagen, thrombin, or arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in isolated rabbit platelet rich-plasma (EC<sub>50</sub>s = 0.31, 0.08, 0.18, and 0.1 μg/ml, respectively).<sup>3</sup> It inhibits platelet thrombus formation in a dog model of electrically induced carotid artery thrombosis when administered at doses ranging from 0.5 to 5 mg/kg.<sup>4</sup> Formulations containing anagrelide have been used in the treatment of thrombocytopenia.

### References

1. Wang, G., Franklin, R., Hong, Y., *et al.* Comparison of the biological activities of anagrelide and its major metabolites in haematopoietic cell cultures. *Br. J. Pharmacol.* **146(3)**, 324-332 (2005).
2. Hong, Y., Wang, G., Gutierrez del Arroyo, A., *et al.* Comparison between anagrelide and hydroxycarbamide in their activities against haematopoietic progenitor cell growth and differentiation: Selectivity of anagrelide for the megakaryocytic lineage. *Leukemia* **20(6)**, 1117-1122 (2006).
3. Fleming, J.S. and Buyniski, J.P. A potent new inhibitor of platelet aggregation and experimental thrombosis, anagrelide (BL-4162A). *Thromb. Res.* **15(3-4)**, 373-388 (1979).
4. Fleming, J.S. and Buyniski, J.P. Anagrelide. *New drugs annual: Cardiovascular drugs*. Scriabine, A., editor, Raven Press (1983).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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