## Aminoglutethimide

Item No. 20947

CAS Registry No.: 125-84-8

| Formal Name: | 3-(4-aminophenyl)-3-ethyl-2,6- <br> piperidinedione |
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| Synonyms: | DL-Aminoglutethimide, |
| MF: | $\mathrm{NSC} 330915^{2}$ |
| FW: | $\mathrm{C}_{13} \mathrm{H}_{16} \mathrm{~N}_{2} \mathrm{O}_{2}$ |
| Purity: | 232.3 |
| UV/Vis. | $\geq 98 \%$ |

UV/Vis.: $\quad \lambda_{\max }: 242 \mathrm{~nm}$
A crystalline solid
Storage: $\quad-20^{\circ} \mathrm{C}$
Stability: $\quad \geq 4$ years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures
Aminoglutethimide is supplied as a crystalline solid. A stock solution may be made by dissolving the aminoglutethimide in the solvent of choice, which should be purged with an inert gas. Aminoglutethimide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of aminoglutethimide in these solvents is approximately $10 \mathrm{mg} / \mathrm{ml}$.

Aminoglutethimide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, aminoglutethimide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Aminoglutethimide has a solubility of approximately $0.5 \mathrm{mg} / \mathrm{ml}$ in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description
Aminoglutethimide is an aromatase inhibitor $\left(\mathrm{IC}_{50}=7.5 \mu \mathrm{M}\right) .{ }^{1}$ Aromatase inhibitors, including aminoglutethimide, inhibit estrogen synthesis via aromatase, suppressing estrogen levels in post-menopausal women. Formulations containing aromatase inhibitors have been used to treat estrogen receptor-positive breast cancer in post-menopausal women. ${ }^{2,3}$

## References

1. Campbell, D.R. and Kurzer, M.S. Flavonoid inhibition of aromatase enzyme activity in human preadipocytes. J. Steroid. Biochem. Mol. Biol. 46, 381-388 (1993).
2. Santen, R.J. and Harvey, H.A. Use of aromatase inhibitors in breast carcinoma. Endocr.-Relat. Cancer 6, 75-92 (1999).
3. Smith, I.E. and Dowsett, M. Aromatase inhibitors in breast cancer. N. EngI. J. Med. 348, 2431-2442 (2003).
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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.
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## 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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