

Proteins

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Product Data Sheet

Flurochloridone

Cat. No.: HY-121337 CAS No.: 61213-25-0 Molecular Formula: $C_{12}H_{10}Cl_2F_3NO$

Molecular Weight: 312.12

Target: Apoptosis; Bcl-2 Family

Pathway: **Apoptosis**

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description

Flurochloridone (R-40244) is a selective preemergence and persistent herbicide. Flurochloridone induces endoplasmic reticulum (ER) stress and activated unfolded protein response (UPR) signaling pathways. Flurochloridone impairs cell viability and induces cytotoxicity and apoptosis mediated by ER stress via activating eIF2 α -ATF4/ATF6-CHOP-Bim/Bax signaling pathways in TM4 cells^{[1][2]}.

REFERENCES

[1]. Zhang F, et al. Flurochloridone Induced Cell Apoptosis via ER Stress and eIF2 α -ATF4/ATF6-CHOP-Bim/Bax Signaling Pathways in Mouse TM4 Sertoli Cells. Int J Environ Res Public Health. 2022 Apr 11;19(8):4564.

[2]. Nikoloff N, et al. Flurochloridone-based herbicides induced genotoxicity effects on Rhinella arenarum tadpoles (Anura: Bufonidae). Ecotoxicol Environ Saf. 2014 Feb;100:275-81.

Caution: Product has not been fully validated for medical applications. For research use only.

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