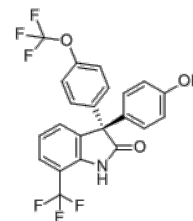


**Product Name** : ErSO  
**Cat. No.** : PC-72844  
**CAS No.** : 2407860-35-7  
**Molecular Formula** : C<sub>22</sub>H<sub>13</sub>F<sub>6</sub>NO<sub>3</sub>  
**Molecular Weight** : 453.34  
**Target** : Estrogen Receptor/ERR  
**Solubility** : 10 mM in DMSO



## Biological Activity

ErSO is a small molecule activator of unfolded protein response (**UPR**), activates the a-UPR, induces rapid and selective necrosis of ER $\alpha$ -positive breast cancer cell lines in vitro.

ErSO inhibits cell viability of breast cancer cell lines expressing wild-type ER $\alpha$  and the ER $\alpha$ Y537S and ER $\alpha$ D538G mutations with IC<sub>50</sub> of 11-43 nM (TYS and TDG).

ErSO acts through ER $\alpha$  to elicit strong and sustained cytotoxic activation of the a-UPR.

ErSO does not compete with estrogens for binding to ER $\alpha$  and selectively kills ER $\alpha$ -positive breast cancer cells including those harboring known resistance-mediating ER $\alpha$  mutations.

ErSO kills ER $\alpha$ -positive breast cancer cell lines in vitro induces complete regression in orthotopic cell line xenograft and patient-derived xenograft (PDX) mouse models, regardless of ER $\alpha$  mutational status and without recurrence after cessation of treatment.

ErSO causes complete regression of most tumors in a fulvestrant-resistant, ER $\alpha$ -mutant, PDX mouse model and metastatic breast cancer mouse models.

## References

Boudreau MW, et al. *Sci Transl Med*. 2021 Jul 21;13(603):eabf1383.

Boudreau MW, et al. *J Med Chem*. 2022 Mar 10;65(5):3894-3912.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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