

## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 IXA4

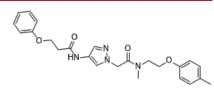
 Cat. No.
 :
 PC-23415

 CAS No.
 :
 1185329-96-7

 Molecular Formula
 :
 C<sub>24</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub>

 Molecular Weight
 :
 436.51

**Solubility** : 10 mM in DMSO



## **Biological Activity**

**Target** 

IXA4 is a specific activator of IRE1/XBP1s signalling activator, promotes IRE1-dependent XBP1 splicing, selective activates the IRE1/XBP1s signaling.

IXA4 does not affect the UPR or other stress-responsive signaling pathways.

IXA4 increases IRE1 RNase activity through a mechanism independent of binding the IRE1 nucleotide-binding pocket.

IXA4 is distinct from currently available IRE1 activators, which bind the kinase active site.

IXA4 improves ER proteostasis of AD-relevant APP mutants, reducing the secretion of  $A\beta$  through the increased targeting of APP to degradation.

IXA4 reduces mitochondrial dysfunction associated with mutant APP overexpression, likely reflecting the reduced intracellular APP afforded by compound treatment.

## References

Grandjean JMD, et al. Nat Chem Biol. 2020 Oct;16(10):1052-1061.

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

E-mail: tech@probechem.com