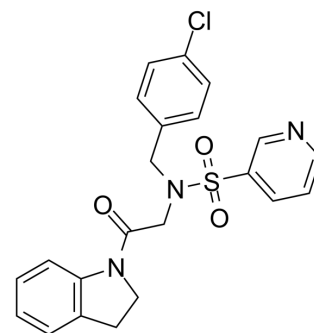


IXA6

Cat. No.:	HY-139212
CAS No.:	1021106-40-0
Molecular Formula:	C ₂₂ H ₂₀ ClN ₃ O ₃ S
Molecular Weight:	441.93
Target:	IRE1
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 33.33 mg/mL (75.42 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2628 mL	11.3140 mL	22.6280 mL
		5 mM	0.4526 mL	2.2628 mL	4.5256 mL
		10 mM	0.2263 mL	1.1314 mL	2.2628 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (2.83 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	IXA6 is a novel IRE1/XBP1s activator, and can induce IRE1 RNase activity ^[1] .	
In Vitro	IXA6 (10 μM; 4 or 18 h) selectively activates IRE1-XBP1s signaling, and activates the XBP1s transcriptional response ^[1] .	
	IXA6 (10 μM; 4 h) shows selectivity for IRE1-XBP1s-dependent ER proteostasis remodeling ^[1] .	
	IXA6 (10 μM; 18 h) reduces secretion of APP through IRE1 activation ^[1] .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Western Blot Analysis ^[1]	
Cell Line:	HEK293T cells	
Concentration:	10 μM	
Incubation Time:	18 hours	

Result:	Increases in ER proteostasis factor gene expression correspond to increased protein levels.
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RT-PCR^[1]

Cell Line:	HEK293T cells
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Concentration:	10 μ M
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Incubation Time:	4 hours
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Result:	Activated the IRE1-XBP1s geneset to levels about 30-40% that observed for Tg (Tg representing 100% activation of each gene).
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Cell Viability Assay^[1]

Cell Line:	HEK293T cells
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Concentration:	10 μ M
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Incubation Time:	4 hours
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Result:	Observed high level of overlap (64%) for genes induced by XBP1s and IXA6.
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RT-PCR^[1]

Cell Line:	Huh7 and SHSY5Y cells
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Concentration:	10 μ M
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Incubation Time:	4 hours
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Result:	Upregulated XBP1s mRNA selectively, in cell lines including Huh7 and SHSY5Y cells.
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RT-PCR^[1]

Cell Line:	CHO cells
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Concentration:	10 μ M
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Incubation Time:	18 hours
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Result:	Observed reduction in A β secretion blocked by cotreatment with 4 μ 8c, confirming this reduction is dependent on IRE1 RNAse activity in CHO7WD10 cells stably expressing wild-type APP (APPWT) and in cells treated with the IXA6.
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REFERENCES

[1]. Julia M D Grandjean, et al. Pharmacologic IRE1/XBP1s activation confers targeted ER proteostasis reprogramming. Nat Chem Biol. 2020 Oct;16(10):1052-1061.

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

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