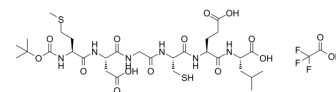


## Box5 TFA

**Cat. No.:** HY-123071A  
**Molecular Formula:** C<sub>32</sub>H<sub>51</sub>F<sub>3</sub>N<sub>6</sub>O<sub>15</sub>S<sub>2</sub>  
**Molecular Weight:** 880.9  
**Target:** Wnt  
**Pathway:** Stem Cell/Wnt  
**Storage:** Sealed storage, away from moisture and light, under nitrogen



Powder    -80°C    2 years  
               -20°C    1 year

\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)

## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 250 mg/mL (283.80 mM; Need ultrasonic)  
 H<sub>2</sub>O : 5 mg/mL (5.68 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.1352 mL	5.6760 mL	11.3520 mL
5 mM	0.2270 mL	1.1352 mL	2.2704 mL
10 mM	0.1135 mL	0.5676 mL	1.1352 mL

Please refer to the solubility information to select the appropriate solvent.

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 3.26 mg/mL (3.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (2.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (2.36 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

Box5 TFA is a potent Wnt5a antagonist. Box5 TFA inhibits Wnt5a signaling and inhibits Wnt5a-mediated Ca<sup>2+</sup> release. Box5 TFA inhibits cell migration. Box5 TFA has the potential for the research of melanoma<sup>[1]</sup>.

### IC<sub>50</sub> & Target

Wnt5a<sup>[1]</sup>

### In Vitro

Box5 TFA (100 μM) decreases the expression of rWnt5a (0.1 μg/mL) stimulated p-MARCKS in A2058 cells<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Jenei V, et al. A t-butyloxycarbonyl-modified Wnt5a-derived hexapeptide functions as a potent antagonist of Wnt5a-dependent melanoma cell invasion. Proc Natl Acad Sci U S A. 2009 Nov 17;106(46):19473-8.

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

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