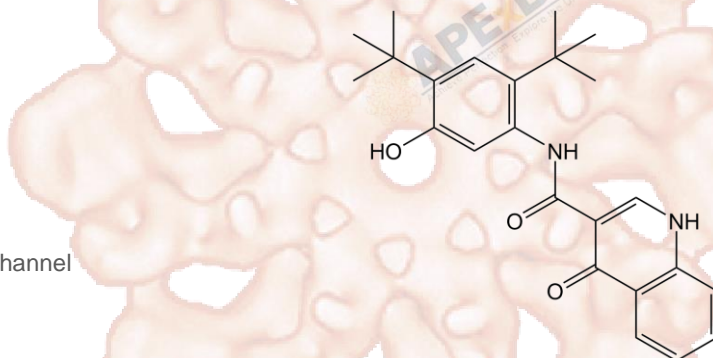


# Product Data Sheet

## Ivacaftor (VX-770)

<b>Cat. No.:</b>	A5047
<b>CAS No.:</b>	873054-44-5
<b>Formula:</b>	C <sub>24</sub> H <sub>28</sub> N <sub>2</sub> O <sub>3</sub>
<b>M.Wt:</b>	392.49
<b>Synonyms:</b>	
<b>Target:</b>	Membrane Transporter/Ion Channel
<b>Pathway:</b>	CFTR
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

insoluble in H<sub>2</sub>O; ≥19.6 mg/mL in DMSO; ≥2.95 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
		1 mM	2.5478 mL	12.7392 mL	25.4784 mL
		5 mM	0.5096 mL	2.5478 mL	5.0957 mL
		10 mM	0.2548 mL	1.2739 mL	2.5478 mL

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

### Biological Activity

Shortsummary

Potent CFTR potentiator

IC<sub>50</sub> & Target

100 nM (G551D-CFTR), 25 nM (F508del-CFTR)

In Vitro

#### Cell Viability Assay

Cell Line: CHO-G551D cells

Preparation method: The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

Reacting conditions: 10 μM; 0 ~ 8 mins

	Applications:	In CHO-G551D cells, VX-770 activated G551D-CFTR channel, and OAG + VX-770 increased G551D-CFTR activity by 58%.
In Vivo	<b>Animal experiment</b>	
	Applications:	

## Product Citations

1. Phua YL, Chen KH, et al. "Loss of miR-17~92 results in dysregulation of Cfr in nephron progenitors." Am J Physiol Renal Physiol. 2019 May 1;316(5):F993-F1005.PMID:30838872

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## References

[1]. Vachel L1, Norez C, Becq F, Vandebrouck C. Effect of VX-770 (ivacaftor) and OAG on Ca<sup>2+</sup> influx and CFTR activity in G551D and F508del-CFTR expressing cells. J Cyst Fibros. 2013 Dec;12(6):584-91.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

**APExBIO Technology**

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