

# Product data sheet



MedKoo Cat#: 531966 Name: ICI 192605 CAS: 117621-64-4 Chemical Formula: C <sub>22</sub> H <sub>23</sub> ClO <sub>5</sub> Exact Mass: 402.1234 Molecular Weight: 402.871		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions:	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

## 1. Product description:

ICI 192605 is a potent thromboxane A<sub>2</sub> receptor (TP receptor) antagonist.

## 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

## 3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	30.0	74.47
DMSO	30.0	74.47
DMSO:PBS (pH 7.2) (1:3)	0.25	0.62
Ethanol	25.0	62.05

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.48 mL	12.41 mL	24.82 mL
5 mM	0.50 mL	2.48 mL	4.96 mL
10 mM	0.25 mL	1.24 mL	2.48 mL
50 mM	0.05 mL	0.25 mL	0.50 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

## 6. Recommended literature which reported protocols for in vitro and in vivo study

### In vitro study

1. Tazzeo T, Miller J, Janssen LJ. Vasoconstrictor responses, and underlying mechanisms, to isoprostanes in human and porcine bronchial arterial smooth muscle. *Br J Pharmacol.* 2003 Oct;140(4):759-63. doi: 10.1038/sj.bjp.0705482. Epub 2003 Sep 22. PMID: 14504139; PMCID: PMC1574071.
2. Daray FM, Minvielle AI, Puppo S, Rothlin RP. Pharmacological characterization of prostanoid receptors mediating vasoconstriction in human umbilical vein. *Br J Pharmacol.* 2003 Aug;139(8):1409-16. doi: 10.1038/sj.bjp.0705375. PMID: 12922927; PMCID: PMC1573974.

### In vivo study

1. Gao YJ, Lee RM. Hydrogen peroxide induces a greater contraction in mesenteric arteries of spontaneously hypertensive rats through thromboxane A<sub>2</sub> production. *Br J Pharmacol.* 2001 Dec;134(8):1639-46. doi: 10.1038/sj.bjp.0704420. PMID: 11739239; PMCID: PMC1572900.
2. Brewster AG, Brown GR, Foubister AJ, Jessup R, Smithers MJ. The synthesis of a novel thromboxane receptor antagonist 4(Z)-6-(2-o-chlorophenyl-4-o-hydroxyphenyl-1,3-dioxan-cis-5-yl) hexenoic acid ICI 192605. *Prostaglandins.* 1988 Aug;36(2):173-8. doi: 10.1016/0090-6980(88)90304-8. PMID: 2973084.

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## 7. Bioactivity

### Biological target:

ICI 192605 is a potent TXA<sub>2</sub>R (thromboxane A<sub>2</sub> receptor) antagonist as cell signaling prostaglandin. ICI 192605 blocks contraction of isolated guinea pig trachea induced by U-46619.

### In vitro activity

ICI 192605 is a highly selective TP receptor blocker with  $pA_2$  of approximately 8. In the present study, 8-*iso* PGE<sub>2</sub>-evoked contractions were markedly and significantly reduced by 10<sup>-8</sup> M ICI 192605, and abolished when the concentration of this blocker was increased 10-fold (Figures 3 and 4), indicating that they are likely directed through TP receptors.

Reference: Br J Pharmacol. 2003 Oct;140(4):759-63. <https://pubmed.ncbi.nlm.nih.gov/14504139/>

### In vivo activity

Compound 3 (ICI 192605) was competitive and selective with  $pA_2$  values of 8.0 +/- 0.1 (rabbit) and 8.4 +/- 0.05 (rat) on smooth muscle preparations and 8.16 +/- 0.01 on human platelets. In vivo activity of 3 was demonstrated in a Konzett Rossler guinea pig model at 0.01 mg/kg p.o.

Reference: Prostaglandins. 1988 Aug;36(2):173-8. <https://pubmed.ncbi.nlm.nih.gov/2973084/>

*Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.*