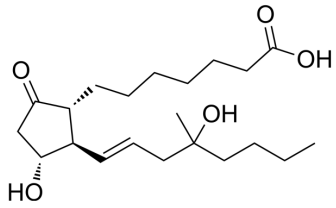
Misoprostol acid

Cat. No.:	HY-118189
CAS No.:	112137-89-0
Molecular Formula:	$C_{21}H_{36}O_5$
Molecular Weight:	368.51
Target:	Prostaglandin Receptor
Pathway:	GPCR/G Protein
Storage:	Solution, -20°C, 2 years



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (135.68 mM; Need ultrasonic and warming)

BIOLOGICAL ACTIVITY

Description	Misoprostol acid is an active metabolite of Misoprostol. Misoprostol is a synthetic analogue of prostaglandin E1 (PGE1), extensively absorbed, and undergoes rapid de-esterification to Misoprostol acid in the gastrointestinal tract after oral administration. Misoprostol can be used for non-steroidal anti-inflammatory drug-induced (NSAID) gastric ulcers[1]. Misoprostol is an oral agent used to induce labor[2].
IC_{50} & Target	EP
In Vivo	Unlike the Misoprostol, Misoprostol acid is detectable in plasma. Misoprostol is a lipophilic methyl ester prodrug and is readily metabolized to the free acid, which is the biologically active form. Misoprostol is used worldwide for a variety of indications in obstetrics and gynecology. Misoprostol has both gastric antisecretory and mucosal protective effects[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Vijaya Bharathi D, et al. Development and validation of highly sensitive method for determination of misoprostol free acid in human plasma by liquid chromatography-electrospray ionization tandem mass spectrometry: application to a clinical pharmacokinetic study. J Chromatogr B Analyt Technol Biomed Life Sci. 2011 Sep 15;879(26):2827-33.

[2]. Schmidt-Hansen M, et al. Simultaneous compared to interval administration of mifepristone and misoprostol for medical abortion up to 10+0 weeks' gestation: a systematic review with meta-analyses. BMJ Sex Reprod Health. 2020 Feb 20. pii: bmjsrh-2019-200448.

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

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