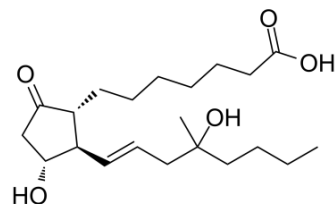


Misoprostol acid

| | |
|---------------------------|---|
| 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: | Please store the product under the recommended conditions in the Certificate of Analysis. |



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] . |
| IC₅₀ & Target | Prostaglandin E1 (PGE1) ^[1] |
| 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.