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DATASHEET

Prostaglandin E2

Product overview

Name	Prostaglandin E2
Cat No	HB3460
Alternative names	Dinoprostone | PGE2
Biological action	Activator
Purity	>98%
Description	Endogenous prostanoid. Induces hematopoietic stem cell proliferation. 3D growth matrix component and used in production of liver and prostate organoids.

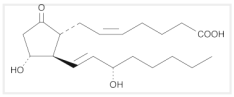
Biological Data

Biological description	Endogenous prostanoid (K_d values are ~1-10 nM at EP_1, EP_2, EP_3 and EP_4 which shows many biological actions and modulates various pathological and physiological activities. It induces hematopoietic stem cell (HSC) proliferation. It can be a used as a 3D growth matrix component and used in production of liver and prostate organoids.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (100mM) or ethanol (45mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	(5*Z*,11α,13*E*,15*S*)-11,15-Dihydroxy-9-o xo-prosta-5,13-dien-1oic acid
Molecular Weight	352.47
Chemical structure	
Molecular Formula	$C_{20}H_{32}O_5$
CAS Number	363-24-6
PubChem identifier	5280360
SMILES	CCCCC[C@H](O)\C=C\[C@H]1[C@H](O)CC(=O)[C@@H]1C\C=C/CCCC(O)=O
InChiKey	XEYBRNLFEZDVAW-ARSRFYASSA-N

References

The multiple faces of prostaglandin E2 G-protein coupled receptor signaling during the dendritic cell life cycle.

De Keijzer et al (2013) Int J Mol Sci 14(4)
PubMedID 23528886

Roles of prostaglandin E2 in cardiovascular diseases.

Suzuki et al (2011) Int Heart J 52(5)
PubMedID 22008433

Prostaglandin E2 regulates vertebrate haematopoietic stem cell homeostasis.

North et al (2007) Nature 447(7147)
PubMedID 17581586

International Union of Pharmacology classification of prostanoid receptors: properties, distribution, and structure of the receptors and their subtypes.

Coleman et al (1994) Pharmacol Rev 46(2)
PubMedID 7938166