HB220318

Recombinant Human Growth Differentiation Factor 6/Bone Morphogenetic Protein-13 (Human GDF-6/BMP-13)

Product Information

Product Name	Cat#	Size
Recombinant Human Growth Differentiation Factor 6/Bone Morphogenetic Protein-13 (Human GDF-6/BMP-13)	92002ES10	10 μg
	92002ES60	100 μg
	92002ES76	500 μg

Product Description

Regulation of GDF6 expression seems to be a mechanism for evolving species-specific changes in skeletal structures. Seems to positively regulate differentiation of chondrogenic tissue through the growth factor receptors subunits BMPR1A, BMPR1B, BMPR2 and ACVR2A, leading to the activation of SMAD1-SMAD5-SMAD8 complex. The regulation of chondrogenic differentiation is inhibited by NOG. Also involved in the induction of adipogenesis from mesenchymal stem cells. This mechanism acts through the growth factor receptors subunits BMPR1A, BMPR2 and ACVR2A and the activation of SMAD1-SMAD5-SMAD8 complex and MAPK14/p38.

Product Properties

Synonyms	BMP13, GDF16
Accession	Q6KF10
GeneID	392255
Source	E.coli-derived Human GDF-6/BMP-13, Thr336-Arg455.
Molecular Weight	Approximately 27.1 kDa.
AA Sequence	TAFASRHGKR HGKKSRLRCS KKPLHVNFKE LGWDDWIIAP LEYEAYHCEG VCDFPLRSHL EPTNHAIIQT LMNSMDPGST PPSCCVPTKL TPISILYIDA GNNVVYKQYE DMVVESCGCR
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED_{50} as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 2.0 μg/mL, corresponding to a specific activity of > 500 IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 0.1 EU per 1μg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 30% Acetonitrile and 0.1% TFA.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20℃. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20℃ to -80℃ for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!