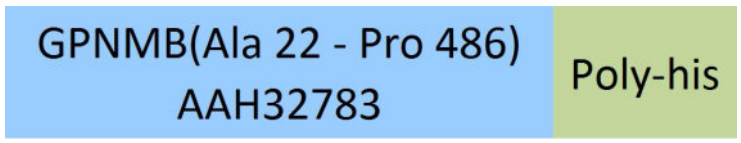
Synonym

GPNMB,HGFIN,NMB,Osteoactivin

Source

Human Osteoactivin, His Tag(GPB-H5229) is expressed from human 293 cells (HEK293). It contains AA Ala 22 - Pro 486 (Accession # AAH32783).
Predicted N-terminus: Ala 22

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 53.4 kDa. The protein migrates as 85-110 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

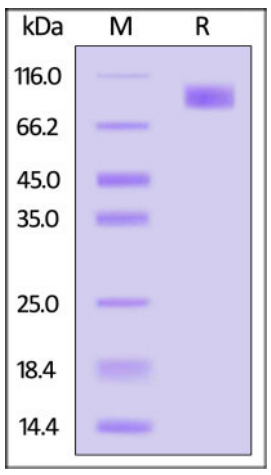
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Osteoactivin, His Tag on SDS-PAGE under reducing (R) condition.
The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Transmembrane glycoprotein NMB (GPNMB) is also known as Transmembrane glycoprotein HGFIN, DC-HIL and Osteoactivin (OA), which belongs to the PMEL/NMB family. GPNMB contains one PKD domain. GPNMB is a transmembrane glycoprotein that is up-regulated in various cancer cells, including in glioblastoma multiforme and is expressed in many melanoma cells, as well as in tissue macrophages. GPNMB protein acts as a downstream mediator of BMP-2 effects on osteoblast differentiation and function. GPNMB participates in bone mineralization, and functions as a negative regulator of inflammation in macrophages.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.