

# Recombinant human BIGH3/TGFBI protein

Catalog Number: BIG0905

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

502-683aa

### UniProt No.

Q15582

### NCBI Accession No.

NP\_000349

### Alternative Names

Transforming growth factor-beta-induced protein ig-h3, Beta ig-h3, Kerato-epithelin, RGD-containing collagen-associated protein, RGD-CAP, BIGH3, CSD3, LCD1, CSD1, CSD2, Transforming growth factor, Beta-induced, 68kD, CDB1, CDGG1

## PRODUCT SPECIFICATION

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### Molecular Weight

19.9 kDa (182aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM EDTA 0.1mM PMSF, 20% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

Non-Tagged

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

BIGH3, also known as TGFBI and Beta ig-h3, is an extracellular matrix protein induced by transforming growth factor (TGF) -beta 1. BIGH3 protein is involved in cell growth, cell differentiation, wound healing and cell

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adhesion. In addition, some missense mutations of BIGH3 were identified in families affected with human autosomal dominant corneal dystrophies. BIGH3 gene encodes for a 683 amino-acid protein containing an RGD motif and four internal repeated domains which have highly conserved sequences founded in several species (Fasciclin domain). Recombinant human BIGH3 protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

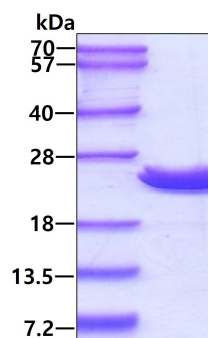
MGTVM DV LKG DNRFSMLVAA IQSAGLTETL NREGVYTVFA PTNEAFRALP PRERSRLLGD AKELANILKY HIGDEILVSG  
GIGALVRLKS LQGDKLEVSL KNNVSVNKE PVAEPDIMAT NGVVHVITNV LQPPANRPQE RGDELADSAL EIFKQASAFS  
RASQRSVRLA PVYQKLLERM KH

## General References

Billings PC., et al. (2002) *J Biol Chem.* 277, 28003-9.  
Munier FL., et al. (2002) *Invest Ophthalmol Vis Sci.* 43, 949-54.  
Kim JE., et al. (2000) *J Biol Chem.* 275, 30907-15.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.