Revision 1

Store at -20C

#2719

# βIG-H3 Antibody

Cell Signaling TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|---|
| W, IP, IF-IC | H | Endogenous | 70 | Rabbit | #Q15582 | 7045 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |
| Immunoprecipitation | 1:50 |
| Immunofluorescence (Immunocytochemistry) | 1:100 |

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

βIG-H3 Antibody detects endogenous levels of total βIG-H3 protein.

## Species predicted to react based on 100% sequence homology

Monkey

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxyl terminus of human βIG-H3. Antibodies were purified by peptide affinity chromatography.

## Background

βIG-H3 (TGFBI/RGD-CAP/Kerato-epithelin) is a 683-amino acid secretory protein induced by TGF-β that plays a role in cell adhesion, differentiation, and apoptosis (1-4). βIG-H3 contains an internal cysteine-rich EMI domain followed by four fasciclin-1 domains and a carboxy terminal RGD domain (1,2). It contributes to cell adhesion through interactions with integrins as well as a number of extracellular matrix (ECM) proteins including collagen, fibronectin, and laminin (5-7). ECM βIG-H3 is found in a wide variety of tissues (8-12). Mutations in the βIG-H3 gene as well as elevated protein levels are most notably associated with corneal dystrophies (13).

## Background References

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6. Billings, P.C. et al. (2002) *J Biol Chem* 277, 28003-9.
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12. LeBaron, R.G. et al. (1995) *J Invest Dermatol* 104, 844-9.
13. Munier, F.L. et al. (1997) *Nat Genet* 15, 247-51.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

## Cross-Reactivity Key

**H:** Human

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