

TGF β RII (H-567): sc-4122 WB

BACKGROUND

A total of three members of the TGF β family, TGF β 1, TGF β 2 and TGF β 3, have been identified in mammals. Each is synthesized as a latent precursor that is subsequently cleaved forming the 112 amino acid growth factor which becomes active upon dimerization. TGF β s mediate their activity by high affinity binding to the type II receptor (TGF β RII) transmembrane protein with a cytoplasmic serine-threonine kinase domain. TGF β RII (TGF-beta receptor type-2), also known as TGFBR2, is a 567 amino acid single-pass type I membrane protein that contains one protein kinase domain and is a member of the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGF β receptor subfamily. For signaling growth inhibition and early gene responses, TGF β RII requires both its kinase activity and association with a TGF β -binding protein, designated the type I receptor. TGF β RII exists as two alternatively spliced isoforms that are encoded by a gene that maps to human chromosome 3.

REFERENCES

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SOURCE

TGF β RII (H-567) is expressed in *E. coli* as a 68 kDa polyhistidine tagged fusion protein corresponding to amino acids 1-567 representing full length TGF β RII of human origin.

PRODUCT

TGF β RII (H-567) is purified from bacterial lysates (>98%) by Ni⁺⁺ affinity chromatography; supplied as 10 μ g protein in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

TGF β RII (H-567) is suitable as a Western blotting control for sc-220, sc-400 and sc-1700.

SELECT PRODUCT CITATIONS

1. Siddiqui, S.S., Siddiqui, Z.K. and Malik, A.B. 2004. Albumin endocytosis in endothelial cells induces TGF β receptor II signaling. Am. J. Physiol. Lung Cell Mol. Physiol. 286: L1016-L1026.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.