

#8406 Store at -20C

Human Transforming Growth Factor β 2 (hTGF- β 2)



Cell Signaling
TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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MW (kDa):
12

UniProt ID:
#P61812

Entrez-Gene Id:
7042

Background

TGF- β 2 is produced by eosinophils, astrocytes, glioblastoma and other cancer derived cell types (1-6). TGF- β 2 inhibits antigen-induced T-cell proliferation, inhibits epithelial cell proliferation, induces mesenchymal cell proliferation and has cell specific effects on apoptosis (1-8). TGF- β 2 binds to T β RII and binding is promoted by T β RIII. T β RI then complexes with T β RII and T β RIII (3,5). Signaling involves phosphorylation of the SMAD proteins (2,3,9). TGF- β 2 also activates Erk2, p38, and JNK pathways (9). Knockout of TGF- β 2 in mice severely impacts heart, lung and eye development (10).

Endotoxin

Less than 0.01 ng endotoxin/1 μ g hTGF- β 2.

Purity

>98% as determined by SDS-PAGE of 6 μ g reduced (+) and non-reduced (-) recombinant hTGF- β 2. All lots are greater than 98% pure.

Source / Purification

Recombinant human TGF- β 2 (hTGF- β 2) Ala303-Ser414 (Accession #NP_003229) was expressed in human 293 cells at Cell Signaling Technology.

Bioactivity

The bioactivity of recombinant hTGF- β 2 was determined by assessing inhibition of IL-4 induced HT-2 cell proliferation. The ED₅₀ of each lot is between 0.1-0.3 ng/ml.

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Background References

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Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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