

Human TGF Beta-1 protein (Recombinant) (STJP000313)

STJP000313

GENERAL INFORMATION

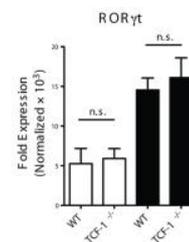
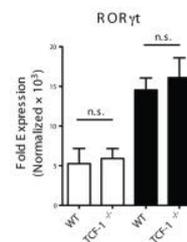
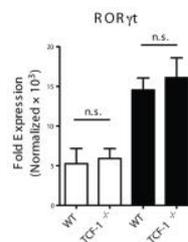
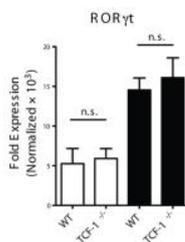
Product Type	Proteins
Short Description	Recombinant-Human TGF Beta-1-protein was developed from hek293. For use in research applications.
Host/Source	HEK293

PRODUCT PROPERTIES

Concentration	
Formulation	Lyophilised from 0.2 Mu m filtered PBS solution pH 7.4.
Purification	
Dilution Range	>95%, as determined by SDS-PAGE and HPLC. NA
Storage Instruction	Can be stored in working aliquots at 2°C-8°C C for one month, or at-20°C C for six months. Avoid repeated freeze/thaw cycles. NA

TARGET INFORMATION

Gene ID	7040
Gene Symbol	TGFB1
Uniprot ID	TGFB1_HUMAN
Immunogen Sequence	



MSC from passage 3 were harvested with trypsin/EDTA and pellets consisting of 5A105 cells were formed by centrifugation. Chondrogenic induction medium consisted of DMEM high glucose supplemented with 0.1 μ M dexamethasone, 0.17 mM ascorbic acid 2-phosphate, 5 μ g/ml transferrin, 5 ng/ml selenium acid, 1 mM sodium pyruvate, 0.35 mM proline, 1.25 mg/ml BSA, 100 units/ml penicillin, 100 μ g/ml streptomycin, 5 μ g/ml insulin and 10 ng/ml TGF-Beta 1. Pellets were cultured for 6 weeks in medium NA >medium NA >chondrogenic medium NA >medium NA >induction medium NA >medium and medium NA >medium was changed three times the weeks.

Ectopic digits were induced by local implantation of heparin beads incubated for 1 hr in 2 μ g/ml rh-TGF Beta 1. For this purpose eggs were windowed at 5.5 id and the bead (ranging between 80 and 150 μ m of diameter) was implanted in the third interdigit of the right leg bud. The contralateral left limb or limbs treated with beads incubated in PBS, were employed as controls. After manipulation the eggs were sealed and further incubated until processing.

Recombinant human TGF-Beta 1 and BMP-2 were reconstituted to a final concentration of 1 mg/ml in PBS containing bovine serum albumin (BSA) as a carrier. The growth factors were fluorescently labeled using the DyLight 488 labeling kit as described by the manufacturer. Briefly, the growth factors were incubated with the fluorescent dye for 1 h at room temperature. The unincorporated dye was removed by passing the mix through a desalting spin column. The labeled growth factors were diluted in PBS to obtain a range of concentrations from 0 to 200 ng/ml. ECMs prepared as described above were incubated overnight at 4°C with 200 μ l of PBS containing either TGF-Beta 1 or BMP-2 at different concentrations. After 24 h, the growth factor solution was collected. ECMs were rinsed twice with PBS to remove unbound growth factor, and the distribution of bound protein on ECMs was imaged using a Nikon Eclipse TE2000-U fluorescent microscope. Growth factor-bound ECMs;

This product is suitable for in-vitro studies under the RESEARCH USE ONLY [RUO] licence. This product must not be used as for diagnostic or other medical purposes.
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