abcam

Product datasheet

Human TGF beta 1 ELISA Kit ab100647

★★★★★ 2 Abreviews 63 References

概述

产品名称 人TGF beta 1 ELISA试剂盒

检测方法 Colorimetric

精确度

样品	n	Mean	SD	CV%	
Overall				< 10%	

批次间

批次内

样品	n	Mean	SD	CV%
Overall				< 12%

样品类型 Cell culture supernatant, Serum, Plasma

检测类型 Sandwich (quantitative)

灵敏度 = 18 pg/ml

范围 18 pg/ml - 4000 pg/ml

回收率 96 %

特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	97.87	85% - 104%
Serum	94.46	82% - 102%
Plasma	95.78	93% - 103%

实验步骤 Multiple steps standard assay

种属反应性 与反应: Human

产品概述 Human TGF beta 1 ELISA (Enzyme-Linked Immunosorbent Assay) kit (ab100647) is an *in vitro*

enzyme-linked immunosorbent assay for the quantitative measurement of Human TGF beta 1 in

serum, plasma and cell culture supernatants.

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This assay employs an antibody specific for Human TGF beta 1 coated on a 96-well plate. Standards and samples are pipetted into the wells and TGF beta 1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human TGF beta 1 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of TGF beta 1 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Ab100647 was reformulated on 31st May 2018 with new capture and detector antibodies that allows to increase the sensitivity to human TGF beta 1.

Please note that as a consequence of this change, the procedure and protocol have slightly changed and we encourage you to review the protocol steps before starting your experiments

Optimization may be required with urine samples.

平台 Microplate

性能

说明

存放说明

Store at -20°C. Please refer to protocols.

组件	1 x 96 tests
20X Wash Buffer	1 x 25ml
500X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent	1 x 15ml
Biotinylated anti-Human TGF beta 1	2 vials
Recombinant Human TGF beta 1 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TGF beta 1 Microplate (12 x 8 wells)	1 unit
TMB One-Step Substrate Reagent	1 x 12ml

功能

Multifunctional protein that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGFB1 and have specific receptors for it. It positively and negatively regulates many other growth factors. It plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts.

组织特异性

Highly expressed in bone. Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA). Co-localizes with ASPN in chondrocytes within OA lesions of articular cartilage.

疾病相关

Defects in TGFB1 are the cause of Camurati-Engelmann disease (CE) [MIM:131300]; also known as progressive diaphyseal dysplasia 1 (DPD1). CE is an autosomal dominant disorder

characterized by hyperostosis and sclerosis of the diaphyses of long bones. The disease typically presents in early childhood with pain, muscular weakness and waddling gait, and in some cases other features such as exophthalmos, facial paralysis, hearing difficulties and loss of vision.

序列相似性 Belongs to the TGF-beta family.

翻译后修饰 Glycosylated.

The precursor is cleaved into mature TGF-beta-1 and LAP, which remains non-covalently linked to

mature TGF-beta-1 rendering it inactive.

细胞定位 Secreted > extracellular space > extracellular matrix.

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