



# Rabbit Anti-Human TGFB1 Polyclonal Antibody (CABT-L121R)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Synthetic peptide within Human TGF-Beta 1 C-Terminal.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat, Zebrafish
<b>Purification</b>	Peptide affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC, IHC, FC Recommended concentration: WB: 1:500-1:1,000 ICC: 1:200 IHC: 1:200 FC: 1:100
<b>Molecular Weight</b>	44 kDa
<b>Positive Control</b>	Raji, MCF-7, A549, human kidney tissue, mouse kidney tissue, SKBR-3, Hela, HepG2
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	50 µl, 100 µl
<b>Buffer</b>	Supplied in 1xPBS (pH7.4), 0.2% BSA, 40% Glycerol, 0.05% Sodium Azide.

<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at 4 °C after thawing. Aliquot store at -20 °C or -80 °C. Avoid repeated freeze/thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	Transforming growth factor beta-1: Multifunctional protein that regulates the growth and differentiation of various cell types and is involved in various processes, such as normal development, immune function, microglia function and responses to neurodegeneration (By similarity). Activation into mature form follows different steps: following cleavage of the proprotein in the Golgi apparatus, Latency-associated peptide (LAP) and Transforming growth factor beta-1 (TGF-beta-1) chains remain non-covalently linked rendering TGF-beta-1 inactive during storage in extracellular matrix. At the same time, LAP chain interacts with 'milieu molecules', such as LTBP1, LRRC32/GARP and LRRC33/NRROS that control activation of TGF-beta-1 and maintain it in a latent state during storage in extracellular milieus. TGF-beta-1 is released from LAP by integrins (ITGAV:ITGB6 or ITGAV:ITGB8): integrin-binding to LAP stabilizes an alternative conformation of the LAP bowtie tail and results in distortion of the LAP chain and subsequent release of the active TGF-beta-1. Once activated following release of LAP, TGF-beta-1 acts by binding to TGF-beta receptors (TGFB1 and TGFB2), which transduce signal.
<b>Keywords</b>	Cartilage-inducing factor;CED;Differentiation inhibiting factor;DPD1;LAP;Latency-associated peptide;Prepro transforming growth factor beta 1;TGF beta 1;TGF beta;TGF beta 1 protein;TGF-beta-5;TGFB;Tgfb-1;tgb1;TGFB1_HUMAN;TGFBeta;TGFBeta1;Transforming Growth Factor b1;Transforming Growth Factor beta 1;Transforming growth factor beta 1a

## GENE INFORMATION

<b>Gene Name</b>	TGFB1
<b>Entrez Gene ID</b>	<a href="#">7040</a>
<b>UniProt ID</b>	<a href="#">P001137</a>