



# Rabbit Anti-Human prostate transglutaminase (TG4) polyclonal antibody (CABT-L6038)

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

## PRODUCT INFORMATION

|                           |   |
|---------------------------|---|
| <b>Product Overview</b>   | Polyclonal antibody to human prostate transglutaminase (TG4)  |
| <b>Immunogen</b>          | Human prostate transglutaminase (full length protein with N-terminal hexahistidin-tag) recombinantly produced in E. coli.     |
| <b>Isotype</b>            | IgG   |
| <b>Source/Host</b>        | Rabbit  |
| <b>Species Reactivity</b> | Human   |
| <b>Purification</b>       | Purified  |
| <b>Conjugate</b>          | Unconjugated  |
| <b>Applications</b>       | IA<br>Optimal dilutions should be determined by the end user.   |
| <b>Format</b>             | Lyophilized.  |
| <b>Size</b>               | 500 µg  |
| <b>Buffer</b>             | The antibody is lyophilized from 170 µL 0.02 M Tris-HCl buffer pH 8.0, 0.028 M NaCl, 2 mg/mL human serum albumin, azide free. |
| <b>Preservative</b>       | None  |
| <b>Storage</b>            | Stable for a minimum of 2 years at –20°C as lyophilized powder<br>Delivery is possible at ambient temperature                 |
| <b>Ship</b>               | Wet ice   |

# BACKGROUND

## Introduction

Tissue transglutaminase is a,  $\text{Ca}^{2+}$ -dependent enzyme (78 kDa) composed by 4 domains: Beta Sheet Domain (fibronectin binding, ~17 kDa), catalytic Core Domain (Cys-His-Asp catalytic triad, Calcium-binding, GTP/GDP-binding, ~37 kDa), Beta Barrel 1 Domain (GTP/GDP-binding, ~14 kDa) and Beta Barrel 2 Domain (~12 kDa). The inactive GTP-bound enzyme is present in a closed conformation, which upon activation by  $\text{Ca}^{2+}$  and substrate binding opens like a pocket knife resulting in a longitudinal open conformation

## Keywords

Tissue transglutaminase; TG1; TG2; TG3; TG4; TG5; TG6; TG7; keratinocyte transglutaminase; tissue transglutaminase; epidermal transglutaminase; prostate transglutaminase; neuronal transglutaminase