



# Mouse Anti-Human TG2 (Catalytic Domain) monoclonal antibody, clone YUH28 (CABT-L6032)

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

## PRODUCT INFORMATION

<b>Product Overview</b>	Monoclonal antibody to human TG2 (Catalytic Domain)
<b>Specificity</b>	Specificity of this item was determined in WB with human transglutaminases (TG1–TG7, FXIII), TG2 of different species and human TG2 domains recombinantly produced in <i>E. coli</i> . This clone is specific for the catalytic Core Domain of TG2. It does not cross-react with other domains of human TG2. It does not cross-react with other human transglutaminases. This antibody recognizes human, guinea pig, rat, mouse and to a weak extend dog TG2.
<b>Immunogen</b>	Human tissue transglutaminase (full length protein with N-terminal hexahistidin-tag) recombinantly produced in insect cells
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human, Guinea pig, Rat, Mouse, Dog
<b>Clone</b>	YUH28
<b>Purification</b>	Protein G Purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IF. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

<b>Epitope</b>	This clone recognizes the epitope DITHTYKYPE
<b>Format</b>	Liquid, Purified
<b>Concentration</b>	Lot specific
<b>Size</b>	200 µg
<b>Buffer</b>	75 mM NaCl, 5 mM Tris, pH7.5, 0.025% sodium azide, 50% glycerol.
<b>Preservative</b>	0.025% sodium azide
<b>Storage</b>	Store at -80°C. If storage at -80°C is not possible, storage at $\leq$ -20°C is recommended. Stable for short term at +4°C.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	Tissue transglutaminase is a, Ca2+-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 Ca2+ and substrate binding opens like a pocket knife resulting in a longitudinal open conformation
<b>Keywords</b>	Tissue transglutaminase; TG1; TG2; TG3; TG4; TG5; TG6; TG7; keratinocyte transglutaminase; tissue transglutaminase; epidermal transglutaminase; prostate transglutaminase; neuronal transglutaminase