



Mouse Anti-Human TG1 monoclonal antibody, clone YUH42 (CABT-L6029)

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

PRODUCT INFORMATION

Product Overview	Monoclonal antibody to human TG1
Specificity	Specificity of this clone was determined in western blotting with human transglutaminases (TG1 – TG7, FXIII). This clone is specific for TG1. It does not cross-react with other human transglutaminases.
Immunogen	Human keratinocyte transglutaminase (full length protein with N-terminal hexahistidin-tag) recombinantly produced in insect cells.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	YUH42
Purification	The IgG fraction was purified by ion exchange chromatography.
Conjugate	Unconjugated
Applications	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.
Format	Liquid, Purified
Concentration	Lot specific
Size	200 µg

Buffer	75 mM NaCl, 5 mM Tris, pH7.5, 0.025% sodium azide, 50% glycerol.
Preservative	0.025% sodium azide
Storage	Store at -80°C. If storage at -80°C is not possible, storage at $\leq -20^{\circ}\text{C}$ is recommended. Stable for short term at +4°C.
Ship	Wet ice

BACKGROUND

Introduction	Tissue transglutaminase is a, 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 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