

Product Data Sheet



Product number: **A139, A140, A141, A157, A158, A165, A166**

Revision number: **RN2.3**

Product Name Monoclonal antibody to human TG6
Host Mouse
Immunogen Human neuronal transglutaminase (full length protein with N-terminal hexahistidin-tag)
recombinantly produced in insect cells (Zedira product No. T021)

Product number	A139	A140	A141	A157	A158	A165	A166
Clone	XTG52	XTG68	XTG39	XTG10	XTG29	XTG60	XTG71
hT6-domain-specificity	Catalytic	β -barrel 1	β -barrel 1	β -barrel 1	β -barrel 2	tbd	tbd
Subtype	IgG2a	IgG2b	IgG2a	IgG2b	IgG1	tbd	tbd
Suitable for Western Blot	✓	✓	✓	✓	✓	✓	✓
Suitable for ELISA	✓	✓	✓	✓	✓	✓	✓
Immunofluorescence	tbd	tbd	tbd	tbd	tbd	tbd	tbd

Formulation 75 mM NaCl, 5 mM Tris, pH7.5, 0.025% sodium azide, 50% glycerol.

Appearance liquid

Working dilutions Optimal dilutions should be determined by the end user.
E.g. for Western-Blotting or ELISA: 1 / 500 to 1 / 5,000 should be suitable

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.

Delivery is possible at ambient temperature.

Related products
A031 FITC-labeled polyclonal antibody to human TG6
A156 Polyclonal antibody to human transglutaminase 6 (TG6)
P111 PEPperCHIP® Transglutaminase Microarray
T021 human neuronal transglutaminase
T064 Inhibited human neuronal transglutaminase
T141 Biotinylated human neuronal transglutaminase

Release date 06 November 2024

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.

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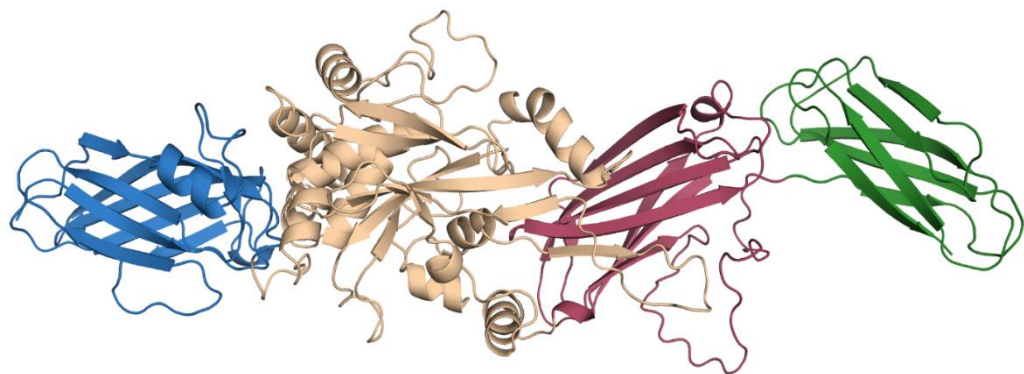
Background info

Neuronal transglutaminase is a, Ca^{2+} -dependent enzyme (79 kDa) composed by 4 domains: Beta Sheet Domain (~15 kDa), Catalytic Domain (Cys-His-Asp catalytic triad, ~37 kDa), Beta Barrel 1 Domain (~16 kDa) and Beta Barrel 2 Domain (~11 kDa).

TG6 sequence deduced from human (TGM6 GenBank: AF540969.1)

MAGIRVTKVDWQSRNGAAHHTQEYPCPELVVRRGQSFSLTLELSRALDCEEIILFTVETGPRASEALH
TKAVFQTSELERGEGWTAAREAQMKTTLTVSLASPPSAVIGRYLLSIRLSSHRKHSNRRLGEFVLLFNP
WCAEDDVFLASEEERQEYVLSDSGIIFRGVEKH IRAQGWN YGQFEEDILNCLSI LDRSPGHQNNPATD
VSCRHNPIYVTRVISAMVNSNNDRGVVGQWQGYGGGTSPLHWRGSAVAILQKWLKGRYKPKVKYGCWV
FAGVLC TVLRCLGIATRVS NFNSAHDTDQNLSDKYVDSFGRTLEDLTEDSMWNFHVWNESWFARQDL
GPSYNGWQVL DATPQEESEGVFRCPASVTAIREGDVHLAHDGPFVFAEVNADYITWLWHEDESREVV
SNTKKIGRCISTKAVGSDSRVDITDLYKYPEGSRKERQVYSKAVNRLFVGEASGRRIWIRRAGGRCLWR
DDLLEPATKPSIAGKFKVLEPPMLGHDRLRLALCLANLTSAQRVRVNLSGATILYTRKPVAEILHESHA
VRLGPQEEKRIPITISYSKYKEDLTEDKKILLAAMCLVTKEKLLVEKDITLEDITIKVLGPAMVGVA
VTVEVTVNPLIERVKDCALMVEGSGLLQEQLSIDVPTLEPQERASVQFDITPSKSGPRQLQVDLVSPH
FPDIKGFVIVHVATAK

Sequence colour	Domain	monoclonal antibody recognition site
Blue:	Beta Sheet Domain	
Yellow:	Catalytic Core Domain	A139
Pink:	Beta Barrel 1 Domain	A140, A141, A157
Green:	Beta Barrel 2 Domain	A158



Model of structure of TG6 in 'open' conformation. An alignment of human TG6 and TG2, generated using CLUSTAL omega, was used to generate a homology model in SWISS model from available X-ray coordinates for human TG2 (PDB 2Q3Z) (courtesy S. Turberville and D. Aeschlimann, Cardiff University, UK).