

AM10205PU-N

Monoclonal Antibody to N epsilon-(gamma-L-glutamyl)-L-lysine isopeptide - Purified

Quantity:	0.1 mg
Concentration:	1.0 mg/ml (after reconstitution)
Host / Isotype:	Mouse / IgM
Recommended Isotype Controls:	SM13P
Clone:	81D4
Immunogen:	Ne-(g-L-glutamyl)-L-lysine isopeptide
Format:	State: Lyophilized purified powder Buffer System: 20mM PO ₄ , 1M NaCl, 2% Sucrose Preservatives: None Reconstitution: Restore in distilled water.
Applications:	ELISA. Immunofluorescence. Immunohistochemistry: 1/50-1/800. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Reacts with Ne (g-L-glutamyl)-L-lysine. Cross reacts in ELISA with N1,N4 bis (gPoly L-glutamyl) Putrescine and N1,N8 bis (gPoly L-glutamyl) Spermidine. There is no cross reaction with: Protein bound Ne acetyl lysine, protein bound N1 or N4 mono (gPoly L-glutamyl) Putrescine, protein bound N1 mono (gPoly L-glutamyl) Spermidine, protein bound Ne (g-L-glutamyl) lysine having a free alpha amine either on its glutamyl or lysyl moieties. The ability of this antibody to fix complement is unknown. Species: All. Other species not tested.
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Shaik KS, Meyer F, Vázquez AV, Flötenmeyer M, Cerdán ME, Moussian B. δ-Aminolevulinate synthase is required for apical transcellular barrier formation in the skin of the Drosophila larva. Eur J Cell Biol. 2012 Mar;91(3):204-15. doi: 10.1016/j.ejcb.2011.11.005. Epub 2012 Jan 30. PubMed PMID: 22293958. 2. Nadalutti CA, Korponay-Szabo IR, Kaukinen K, Griffin M, Mäki M, Lindfors K. Celiac disease patient IgA antibodies induce endothelial adhesion and cell polarization defects via extracellular transglutaminase 2. Cell Mol Life Sci. 2014 Apr;71(7):1315-26.

- doi: 10.1007/s00018-013-1455-5. Epub 2013 Aug 28. PubMed PMID: 23982754.
3. de Jager M, van der Wildt B, Schul E, Bol JG, van Duinen SG, Drukarch B, Wilhelmus MM. Tissue transglutaminase colocalizes with extracellular matrix proteins in cerebral amyloid angiopathy. *Neurobiol Aging*. 2012 Oct 30.
4. Elli L, Ciulla MM, Busca G, Roncoroni L, Maioli C, Ferrero S, et al. Beneficial effects of treatment with transglutaminase inhibitor cystamine on the severity of inflammation in a rat model of inflammatory bowel disease. *Lab Invest*. 2011 Mar;91(3):452-61. doi: 10.1038/labinvest.2010.186. Epub 2010 Nov 1. PubMed PMID: 21042292.
5. Thomas V et al. Definition of the fine specificity of the monoclonal antibody 81D4: its reactivity with lysine and polyamine isopeptide cross-links. *J Immunol Methods*. 2004 Sep;292(1-2):83-95.
6. Johnson GV, LeShoure R Jr. Immunoblot analysis reveals that isopeptide antibodies do not specifically recognize the epsilon-(gamma-glutamyl)lysine bonds formed by transglutaminase activity. *J Neurosci Methods*. 2004 Apr 30;134(2):151-8.
7. Kaartinen MT, El-Maadawy S, Räsänen NH, McKee MD. Tissue transglutaminase and its substrates in bone. *J Bone Miner Res*. 2002 Dec;17(12):2161-73. PubMed PMID: 12469910.

Pictures:

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - N epsilon gamma glutamyl Lysine antibody: Localization on N epsilon gamma glutamyl Lysine bonds on sections of skin.

