

Product datasheet for **AM20243PU-S**

Dityrosine / DT Mouse Monoclonal Antibody [Clone ID: 1C3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1C3
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA (Ref.1,2) Western blot: 4 µg/ml (Ref.3,5) Immunohistochemistry on Paraffin Sections (Ref.4,6).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	3-(p-hydroxyphenyl) Propionic Acid Dimer, KLH-conjugated
Specificity:	Specific for <i>free</i> Dityrosine, 3-(p-hydroxyphenyl) Propionic Acid dimer, Dityrosine-BSA conjugate, and Dityrosine in proteins or peptides. There was no cross reactivity detected for following compounds: Tyrosine, Nitrotyrosine, Chlorotyrosine, Aminotyrosine, Phosphotyrosine, 3-(p-hydroxyphenyl) Propionic Acid, Phenylalanine, 3,4-Dihydroxyphenylacetic Acid (DOPA).
Formulation:	10mM PBS, pH 7.4 State: Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore in 0.2 ml aqua bidest to 0.1 mg/ml of IgG
Concentration:	0.1 mg/ml (after reconstitution)
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



[View online »](#)

Background:

Tyrosine is one of the major targets of protein oxidation, and until today various tyrosine derivatives such as nitrotyrosine, dityrosine and halogenated tyrosine depending on the type of free radicals. DT is a tyrosine dimer derived from tyrosyl radicals which is formed by reactive oxygen species (ROS), metal-catalyzed oxidation, ultraviolet irradiation, and peroxidases. DT have been found in atherosclerotic lesions, and lipofuscin of pyramidal neurons of aged human brains. Dityrosine is one of the specific biomarkers for protein oxidation.

Product images:

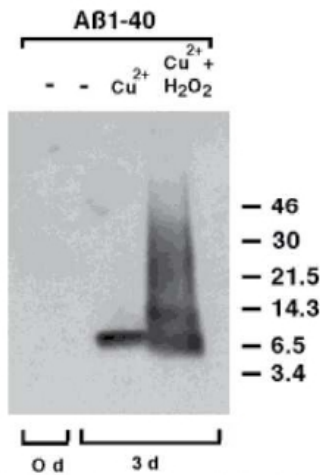


Figure 2. Western blot analysis of Dityrosine - cross-linked Human Amyloid Beta. 200 ng of Abeta 1-40 peptides before and after Cu (II)-Oxidation were separated by SDS-PAGE and immunoblotted with AM20243PU-S. AM20243PU-S detects dimeric and trimeric Abeta 1-4

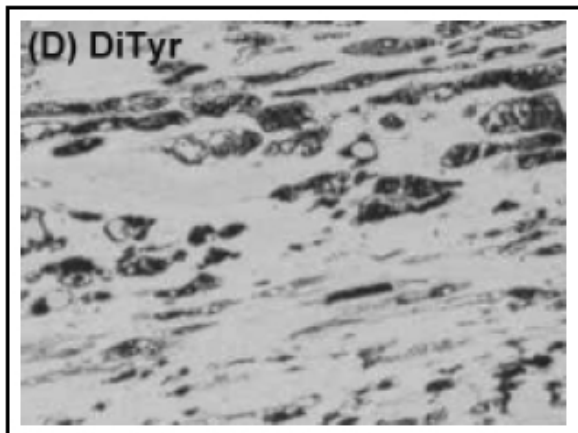


Figure 1. Immunohistochemistry image of Dityrosine staining in Paraffin Section of Human atherosclerotic lesion. The section was activated in Vector Antigen Unmasking Solution at 121°C for 10min prior to blocking. The section was incubated with AM20243PU-S