

Datasheet for ABIN5067479
anti-Dityrosine antibody (APC)

4 Images

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Overview

Quantity:	100 µg
Target:	Dityrosine (DT)
Reactivity:	Please inquire
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Dityrosine antibody is conjugated to APC
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FACS)

Product Details

Immunogen:	Synthetic Dityrosine conjugated to Keyhole Limpet Hemocyanin (KLH).
Clone:	10A6
Isotype:	IgG1
Specificity:	Specific for dityrosine modified proteins. Does not cross-react with 3,5-dibromotyrosine or bromotyrosine modified proteins.
Purification:	Protein G Purified

Target Details

Target:	Dityrosine (DT)
Alternative Name:	Dityrosine (DT Products)

Target Details

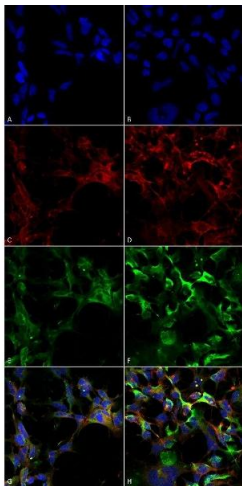
Target Type:	Dipeptide
Background:	ROS such as hydrogen peroxide (H ₂ O ₂), superoxide, and hydroxyl radicals can react with both the backbone and the side chains of proteins, leading to backbone cleavage and side-chain modifications, respectively. Peroxidases, UV radiation, and hydroxyl radicals catalyze the formation of tyrosyl radicals which then react to form cross-links between proteins (1). This produces dityrosine, a metabolically stable biomarker of protein oxidation (2).

Application Details

Application Notes:	<ul style="list-style-type: none">• WB (1:1000)• ICC/IF (1:50)• FACS (1:50)• FCM (1:50)• ELISA (1:1000)• optimal dilutions for assays should be determined by the user.
Comment:	A 1:1000 dilution of ABIN5067479 was sufficient for detection of dityrosine in 1 µg of Dityrosine conjugated to BSA by ECL immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary Antibody.
Restrictions:	For Research Use only

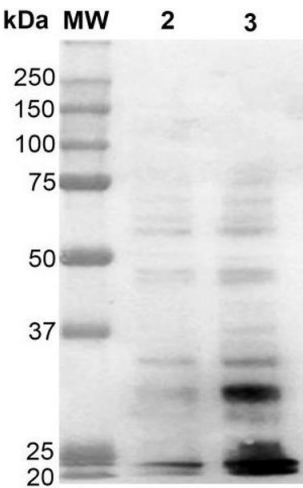
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % Sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C



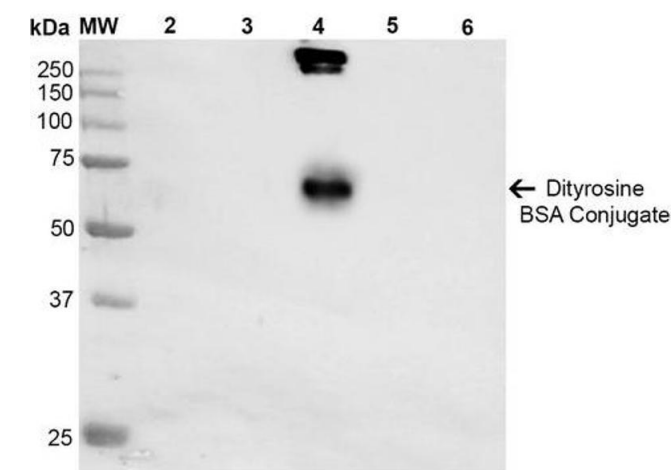
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Dityrosine Monoclonal Antibody, Clone 10A6 (ABIN5067479). Tissue: Embryonic kidney epithelial cell line (HEK293). Species: Human. Fixation: 5 % Formaldehyde for 5 min. Primary Antibody: Mouse Anti-Dityrosine Monoclonal Antibody (ABIN5067479) at 1:50 for 30-60 min at RT. Secondary Antibody: Goat Anti-Mouse Alexa Fluor 488 at 1:1500 for 30-60 min at RT. Counterstain: Phalloidin Alexa Fluor 633 F-Actin stain, DAPI (blue) nuclear stain at 1:250, 1:50000 for 30-60 min at RT. Localization: Cytoplasmic. Magnification: 20X (2X Zoom). (A,C,E,G) - Untreated. (B,D,F,H) - Cells cultured overnight with 50 µM H2O2. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alexa Fluor 633 F-Actin stain. (E,F) Dityrosine Antibody. (G,H) Composite. Courtesy of: Dr. Robert Burke, University of Victoria.



Western Blotting

Image 2. Western Blot analysis of Human Cervical Cancer cell line (HeLa) showing detection of Dityrosine-BSA using Mouse Anti-Dityrosine Monoclonal Antibody, Clone 10A6 . Lane 1: Molecular Weight Ladder (MW). Lane 2: HeLa cell lysate. Lane 3: H2O2 treated HeLa cell lysate. Load: 12 µg. Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Dityrosine Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT.



Western Blotting

Image 3. Western Blot analysis of Dityrosine-BSA Conjugate showing detection of 67 kDa Dityrosine-BSA using Mouse Anti-Dityrosine Monoclonal Antibody, Clone 10A6 . Lane 1: Molecular Weight Ladder (MW). Lane 2: BSA. Lane 3: 3,5-Dibromotyrosine-BSA. Lane 4: Dityrosine-BSA. Lane 5: Bromotyrosine-BSA. Lane 6: 7-ketocholesterol-BSA. Load: 1 µg. Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Dityrosine Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 67 kDa.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5067479.