Datasheet for ABIN2484578

anti-Phosphotyrosine antibody (HRP)

2 Images

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Overview

Quantity:	100 µg
Target:	Phosphotyrosine
Reactivity:	Please inquire
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Phosphotyrosine antibody is conjugated to HRP
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), Immunohistochemistry (IHC), Immunocytochemistry (ICC)

Product Details

Immunogen:	Phosphotyrosine, alanine and glyceine in a 1:1:1 ratio polymerized in the presence of keyhole limpet hemocyanin with 1-ethyl-3-(3'-dimentrylaminopropyl) carbodiimide
Clone:	G104
Isotype:	IgG1
Specificity:	Reacts with phosphotyrosine, and detects the presence of phosphotyrosine in both un-stimulated and stimulated cell lysates. Does not cross-react with phosphoserine or phosphothreonine.
Purification:	Protein G Purified

Target Details

Target:	Phosphotyrosine

Target Details

Abstract:	Phosphotyrosine Products
Target Type:	Amino Acid
Background:	Protein phosphorylation is an important posttranslational modification that serves many key functions to regulate a protein's activity, localization, and protein-protein interactions. Phosphorylation is catalyzed by various specific protein kinases, which involves removing a phosphate group from ATP and covalently attaching it to to a recipient protein that acts as a substrate. Most kinases act on both serine and threonine, others act on tyrosine, and a number (dual specificity kinases) act on all three. Because phosphorylation can occur at multiple sites on any given protein, it can therefore change the function or localization of that protein at any time (3). Changing the function of these proteins has been linked to a number of diseases, including cancer, diabetes, heart disease, inflammation and neurological disorders (4-6). In particular, the phosphorylation of tyrosine is considered one of the key steps in signal transduction and regulation of enzymatic activity (7). Phosphotyrosine can be detected through specific antibodies, and are helpful in facilitating the identification of tyrosine kinase substrates (8).

Application Details

Application Notes:	• WB (1:1000) • IHC (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2484578 was sufficient for detection of phosphorylated tyrosine residues in 10 µg of rat tissue lysate by colorimetric immunoblot analysis using Goat anti-rat IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

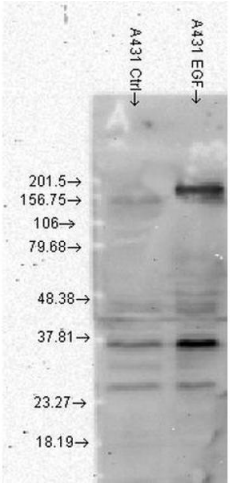
Handling

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.

Handling

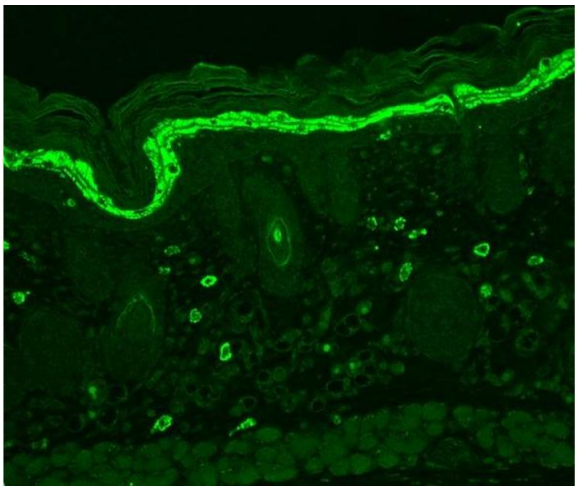
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



Western Blotting

Image 1. Western Blot analysis of Human A431 cell lysates showing detection of Phosphotyrosine protein using Mouse Anti-Phosphotyrosine Monoclonal Antibody, Clone G104 . Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Phosphotyrosine Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT. Left: normal, right: EGF treated.



Immunohistochemistry

Image 2. Immunohistochemistry analysis using Mouse Anti-Phosphotyrosine Monoclonal Antibody, Clone G104 . Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Phosphotyrosine Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Stratum granulosum staining in the epidermis. Some dermal staining.