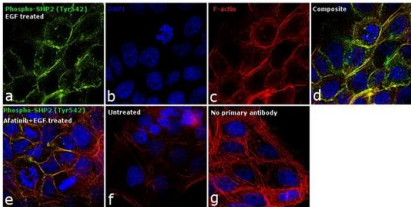


Phospho-SHP2 (Tyr542) Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human SHP2 that contains tyrosine 542. The sequence is conserved in mouse, rat and chicken.
Form	Liquid
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_2533679

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	-
Immunohistochemistry (Paraffin) (IHC (P))	1:20	-
Immunocytochemistry (ICC/IF)	5 µg/mL	-

Product Images For Phospho-SHP2 (Tyr542) Polyclonal Antibody

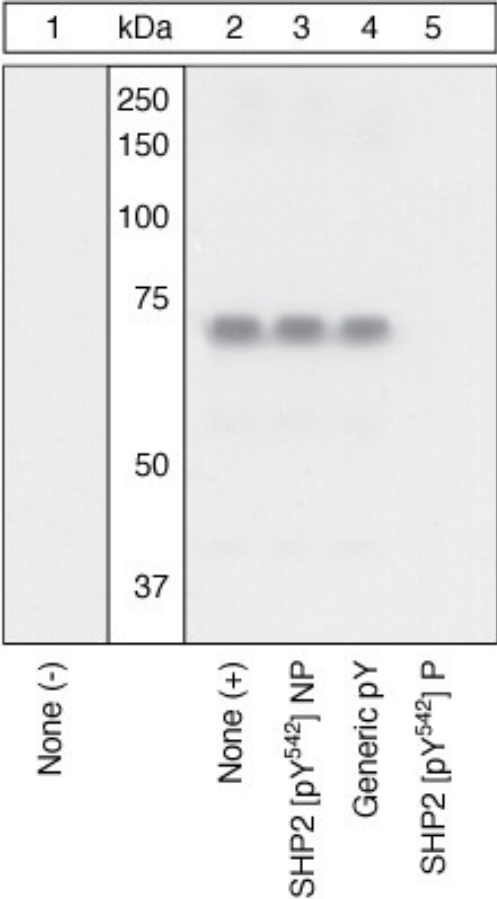


Phospho-SHP2 (Tyr542) Antibody (44-554G)

Altered expression of target protein upon cell treatment demonstrates antibody specificity. Immunofluorescence analysis of Phospho-SHP-2 (Tyr542) using Phospho-SHP-2 (Tyr542) Polyclonal Antibody (Product # 44-554G) shows induction of SHP-2 phosphorylation at Tyr542 residue in A-431 cell line upon EGF treatment. Pre-treatment with EGFR-antagonist Afatinib resulted in inhibition of phosphorylation following EGF treatment. {TM}

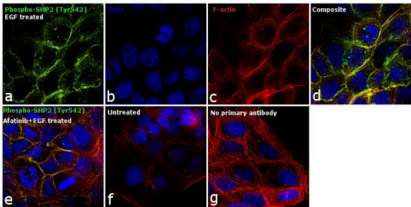
Phospho-SHP2 (Tyr542) Antibody (44-554G) in WB

Peptide Competition. Lysates prepared from NIH3T3 cells left untreated (1) or treated with PDGF (2-5). were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were blocked with a 3% BSA-TBST buffer for one hour at room temperature, and incubated with SHP2 (pY542) antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (1, 2), the non-phosphopeptide corresponding to the immunogen (3), a generic phosphotyrosine-containing peptide (4), or, the phosphopeptide immunogen (5). After washing, membranes were incubated with goat F (ab')₂ anti-rabbit IgG HRP conjugate (Product # ALI4404) and bands were detected using the Pierce SuperSignal™ method. The data show that only the peptide corresponding to SHP2 (pY542) blocks the signal, verifying the specificity of the antibody.



Phospho-SHP2 (Tyr542) Antibody (44-554G) in ICC/IF

Immunofluorescence analysis of Phospho-SHP-2 (Tyr542) Polyclonal Antibody was performed using 90% confluent log phase A-431 cells treated with 200 ng /mL of EGF for 10 minutes. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Phospho-SHP-2 (Tyr542) Polyclonal Antibody (Product # 44-554G) at 1:250 dilution in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing membrane localization. Panel e represents cells treated with antagonist, Afatinib (0.5 uM for 6hrs) followed by EGF (200 ng/mL for 10 minutes), showing reduced expression of phospho-SHP2. Panel f shows untreated cells with no signal. Panel g represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



View more figures on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.