

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Phospho-Smad2/3 when dually phosphorylated at S465/S467 and S423/S425, respectively.
Source	Polyclonal Rabbit Serum
Purification	N/A
Immunogen	Phosphopeptide containing human Smad3 S423/S425 sites
Formulation	Lyophilized from rabbit serum in PBS and Sodium Azide. See Certificate of Analysis for details.

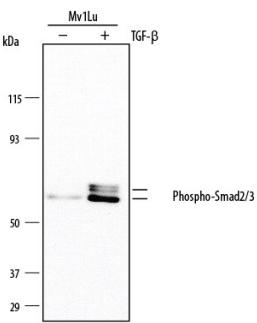
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1:500 dilution	See Below
Immunocytochemistry	1:50-1:100 dilution	See Below
Simple Western	1:50-1:100 dilution	See Below

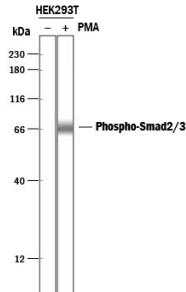
DATA

Western Blot

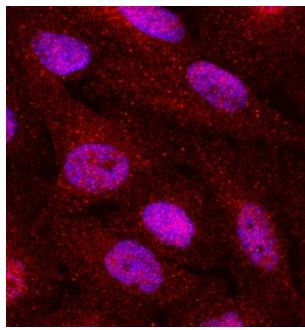


Detection of Human Phospho-Smad2 (S465/S467)/ Smad3 (S423/S425) by Western Blot. Western blot shows lysates of Mv1Lu mink lung epithelial cell line untreated (-) or treated (+) with 10 ng/mL Recombinant Human TGF-β2 (Catalog # 302-B2) for 24 hours. PVDF membrane was probed with 1:500 dilution of Rabbit Anti-Human Phospho-Smad2 (S465/S467)/ Smad3 (S423/S425) Polyclonal Antibody (Catalog # AB3226), followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for Phospho-Smad2 (S465/S467)/ Smad3 (S423/S425) at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Simple Western



Immunocytochemistry



Phospho-Smad2 (S465/S467)/ Smad3 (S423/S425) in Mv1Lu Mink Cell Line. Smad2/3 phosphorylated at S465/S467 and S423/S425 was detected in immersion fixed Mv1Lu mink lung epithelial cell line treated with 10 ng/mL of Recombinant Human TGF-beta 2 (Catalog # 302-B2) using Rabbit Anti-Human Phospho-Smad2 (S465/S467)/ Smad3 (S423/S425) Polyclonal Antibody (Catalog # AB3226) at 1:50-1:100 dilution for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute with 250 µL sterile PBS containing 0.02% Sodium Azide.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Smad3 (mothers against DPP homolog 3) is a transcription factor that functions downstream of the transforming growth factor β receptor (TGF- β R). Smad3 is phosphorylated in cells stimulated with TGF- β , complexes with Smad4, and translocates to the nucleus to upregulate gene transcription. Smad3 is critical for signaling fibrosis and wound healing.