

## Anti-Smad3 Rabbit Monoclonal Antibody

Catalog Number: M00059

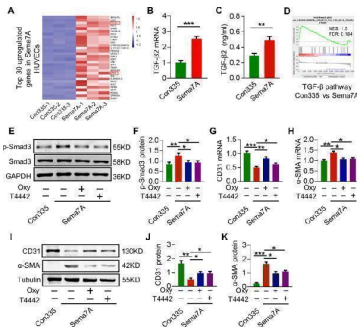
### Overview

Product Name	Anti-Smad3 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Smad3 Rabbit Monoclonal Antibody catalog # M00059. Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal FG-19
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P84022

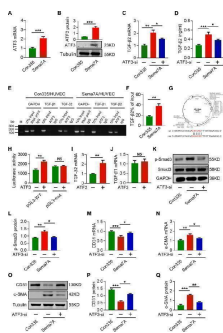
### Technical Details

Immunogen	A synthesized peptide derived from human Smad3
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200 FC 1:50

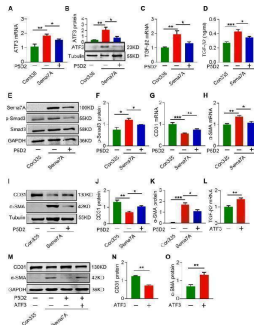
## Anti-Smad3 Rabbit Monoclonal Antibody (M00059) Images



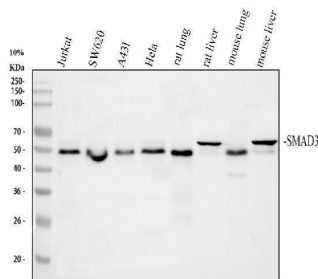
TGF-beta2 gene expression and TGF-Smad signaling are augmented in Sema7A-HUVECs. a The top 30 upregulated genes in Sema7A-HUVECs compared with Con335-HUVECs. b TGF-beta2 mRNA level was analyzed by qPCR normalized to GAPDH. Fold changes are shown. Data are mean  $\pm$  SEM, N = 3, \*\*\* p



Inhibition of ATF3 reduced TGF-beta2 expression and Sema7A-induced EndMT. a ATF3 mRNA level was analyzed by qPCR normalized to GAPDH. Fold changes are shown. Data are mean  $\pm$  SEM, N = 3, \*\*\* p

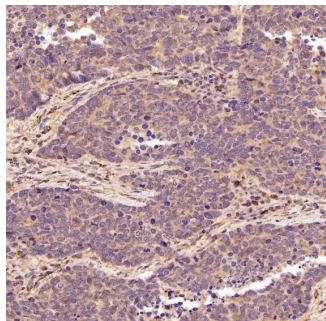


B1 integrin mediates Sema7A signal to TGF-beta2 via ATF3. a Cells were treated with beta1 integrin antibody (P5D2), and ATF3 mRNA level was analyzed by qPCR normalized to GAPDH. Fold changes are shown. Data are mean  $\pm$  SEM, N = 3, \* p

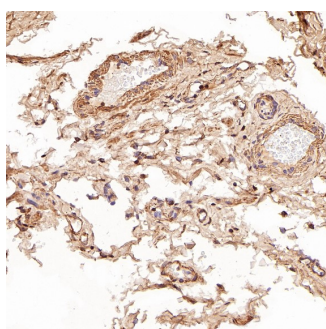


Western blot analysis of Smad3 using anti-Smad3 antibody (M00059). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: human SW620 whole cell lysates, Lane 3: human A431 whole cell lysates, Lane 4: human Hela whole cell lysates, Lane 5: rat lung tissue lysates, Lane 6: rat liver tissue lysates, Lane 7: mouse lung tissue lysates, Lane 7: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Smad3 antigen affinity purified monoclonal antibody (M00059) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate

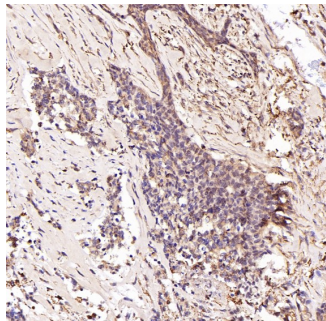
(Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for Smad3 at approximately 50 kDa. The expected band size for Smad3 is at 48 kDa.



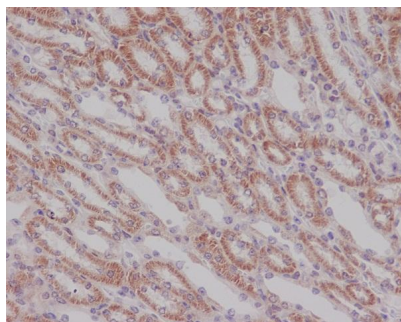
Immunohistochemical analysis of paraffin-embedded Human lung large cell cancer, using the Antibody at 1:500 dilution.



Immunohistochemical analysis of paraffin-embedded Human testis cancer, using the Antibody at 1:500 dilution.

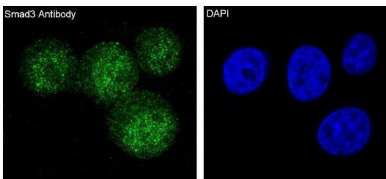
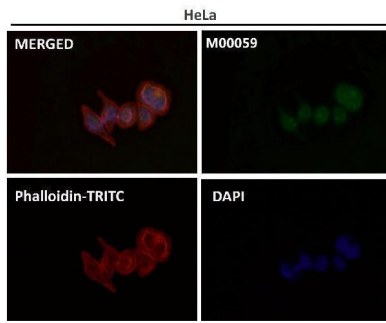


Immunohistochemical analysis of paraffin-embedded Human breast cancer, using the Antibody at 1:500 dilution.



Immunohistochemical analysis of paraffin-embedded mouse kidney, using Smad3 Antibody.

Immunofluorescent analysis using the Antibody at 1:150 dilution.



Immunofluorescent analysis of HeLa cells, using Smad3 Antibody.

## 2 Publications Citing This Product

1. PubMed ID: 32826874, Hong L, Li F, Tang C, Li L, Sun L, Li X, Zhu L. Semaphorin 7A promotes endothelial to mesenchymal transition through ATF3 mediated TGF-beta2/Smad signaling. Cell Death Dis. 2020 Aug 10;11(8):695. doi:10.1038/s41419-020-02818-x. PMID:32826874; PMCID:PMC7442651.
2. PubMed ID: 25356121, Shi K, Jiang J, Ma T, Xie J, Duan L, Chen R, Song P, Yu Z, Liu C, Zhu Q, Zheng J. Int J Clin Exp Med. 2014 Sep 15;7(9):2645-50. Ecollection 2014. Dexamethasone Attenuates Bleomycin-Induced Lung Fibrosis In Mice Through Tgf-??, Smad3 And Jak-Stat P...

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