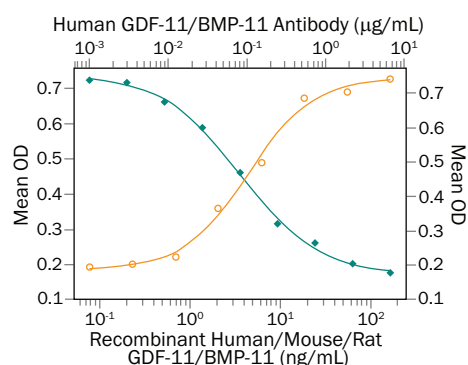


Modulation of TGF- β Superfamily Signaling Pathways

Blocking and Neutralizing Antibodies: Trusted Bioactivity

Molecule	Species	Catalog #
Activin A	Human, Mouse, Rat	MAB3381
BMP-2/BMP-4	Human	MAB3552
BMP-4	Human	MAB757
BMP-6	Human	MAB507
BMP-7	Human	MAB3541
BMP-9	Human, Mouse	MAB3209
GDF-11/GDF-8	Human	MAB19582
GDF-8/Myostatin	Human, Mouse, Rat	AF788
GDNF	Human, Rat	AF-212-NA
TGF- β 1/1.2	Multi-species	AF-101-NA

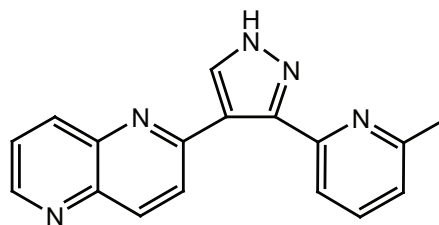


GDF-11/GDF-8 Neutralizing Antibody Blocks GDF-11 Induced Hemoglobin Expression. Recombinant Human/Mouse/Rat GDF-11/BMP-11 (Catalog # 1958-GD) induces hemoglobin expression in the K562 human chronic myelogenous leukemia cell line in a dose-dependent manner (orange line), as measured by the pseudoperoxidase assay. Induction of hemoglobin expression by GDF-11/BMP-11 (25 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human GDF-11/GDF-8 Monoclonal Antibody (Catalog # MAB19582). The ND_{50} is typically 0.04–0.2 μ g/mL. This antibody also neutralizes GDF-8 in a similar bioassay.

TOCRIS
a biotechne brand

TGF- β Superfamily-Related Small Molecules
from Tocris Bioscience

Product Name	Catalog #	Product Description
A 83-01	2939	Selective inhibitor of TGF- β RI, ALK-4 and ALK-7
DMH-1	4126	Selective ALK-2 inhibitor
GW 788388	3264	Potent and selective inhibitor of TGF- β RI
ITD1	5068	Selective inhibitor of TGF- β signaling
K 02288	4986	Type 1 BMP receptor inhibitor
LY 364947	2718	Selective inhibitor of TGF- β RI
(5Z)-7-Oxozeaenol	3604	Potent and selective TAK1 MAPKKK inhibitor
RepSox	3742	Potent and selective inhibitor of TGF- β RI
SB 431542	1614	Potent and selective inhibitor of TGF- β RI, ALK-4 and ALK-7
SB 525334	3211	Selective inhibitor of TGF- β RI
SB 505124	3263	Selective inhibitor of TGF- β RI, ALK-4 and ALK-7
SD 208	3269	Potent ATP-competitive TGF- β RI inhibitor



RepSox - Catalog # 3742

RepSox is a selective inhibitor of TGF- β RI/ALK-5 (IC_{50} values are 4 and 23 nM for TGF- β RI autophosphorylation and TGF- β RI binding respectively). This compound is selective for TGF- β RI over a range of kinases, including p38 MAPK, JNK1 and GSK3 ($IC_{50} > 16 \mu$ M). RepSox enhances the efficiency of cellular reprogramming and replaces SOX2 by inducing Nanog expression.

LEARN MORE
www.tocris.com

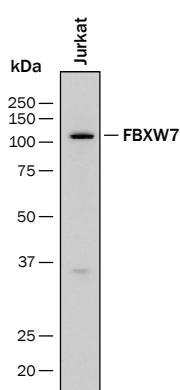
Antibodies to Visualize TGF- β Superfamily Signaling

Molecule	Species	Application	Catalog #
Endoglin/CD105	Human	FC	FAB10971 - various conjugates available
	Rat	ICC, IHC, IP, WB	AF6440
FBXW7/Cdc4	Human	WB	MAB7776
Follistatin	Human	IHC, WB	MAB669
GDF-11/BMP-11	Human	IHC, WB	MAB19581
NCAM-1/CD56	Mouse	FC	FAB7820 - various conjugates available
Ret	Mouse	IHC, WB	AF482
Smad7	Human, Mouse, Rat	IHC, WB	MAB2029
SOST/Sclerostin	Mouse	IHC, WB	AF1589
STAT3	Human, Mouse, Rat	ICC, IP, FC, WB	MAB1799

Application Key: **FC** Flow Cytometry **ICC** Immunocytochemistry **IHC** Immunohistochemistry **IP** Immunoprecipitation **WB** Western blot

Emerging TGF- β Signaling Molecule

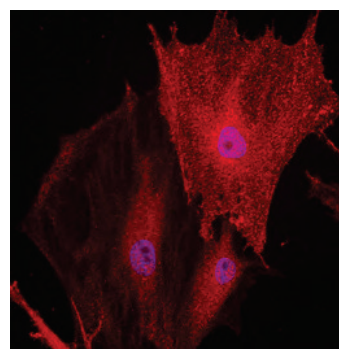
FBXW7/Cdc4



Detection of Human FBXW7/Cdc4 by Western Blot. FBXW7/Cdc4 Regulates TGF- β -dependent Cell Growth and Migration. This western blot uses the Mouse Anti-Human FBXW7/Cdc4 Monoclonal Antibody (Catalog # MAB7776) and HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog #HAF018) to detect FBXW7/Cdc4 in Jurkat human acute T cell leukemia cell line lysates.

New Release!

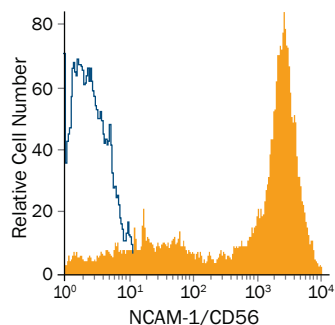
Rat Endoglin/CD105



Endoglin/CD105 Localized to Plasma Membrane in Rat Mesenchymal Stem Cells. Endoglin/CD105 was detected in immersion fixed undifferentiated rat mesenchymal stem cells using Goat Anti-Rat Endoglin/CD105 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6440). Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue).

Reliable Antibody for Flow Cytometry

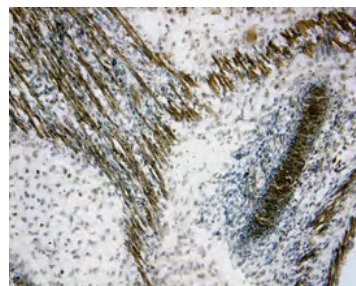
NCAM-1/CD56



Detection of NCAM-1/CD56 by Flow Cytometry. The Neuro 2A mouse neuroblastoma cell line was stained for NCAM-1/CD56, a receptor for GDNF, with Rat Anti-Mouse NCAM-1/CD56 APC-conjugated Monoclonal Antibody (filled histogram, Catalog # FAB7820A) or isotype control antibody (open histogram, Catalog # IC006A).

Highly Published

SOST/Sclerostin



SOST/Sclerostin Expression in Mouse Embryo. SOST/Sclerostin was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Goat Anti-Mouse SOST/Sclerostin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1589). Tissue was stained using the Anti-Goat HRP-DAB Cell and Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). *Relevant citations for SOST/Sclerostin can be viewed on rndsystems.com.