

FGF-15 (G-5): sc-398338

BACKGROUND

Acidic and basic fibroblast growth factors (FGFs) are members of a family of multifunctional polypeptide growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Like other growth factors, FGFs act by binding and activating specific cell surface receptors. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. Fibroblast growth factor-15 (FGF-15), a secreted protein expressed mainly in the developing brain, is important for cell division and patterning regulation in specific embryonic brain regions.

CHROMOSOMAL LOCATION

Genetic locus: *Fgf15* (mouse) mapping to 7 F5.

SOURCE

FGF-15 (G-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 88-105 within an internal region of FGF-15 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-15 (G-5) is available conjugated to agarose (sc-398338 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398338 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398338 PE), fluorescein (sc-398338 FITC), Alexa Fluor® 488 (sc-398338 AF488), Alexa Fluor® 546 (sc-398338 AF546), Alexa Fluor® 594 (sc-398338 AF594) or Alexa Fluor® 647 (sc-398338 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398338 AF680) or Alexa Fluor® 790 (sc-398338 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398338 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FGF-15 (G-5) is recommended for detection of FGF-15 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FGF-15 siRNA (m): sc-39473, FGF-15 shRNA Plasmid (m): sc-39473-SH and FGF-15 shRNA (m) Lentiviral Particles: sc-39473-V.

Molecular Weight of FGF-15: 25 kDa.

Positive Controls: FGF-15 (m): 293T Lysate: sc-126850.

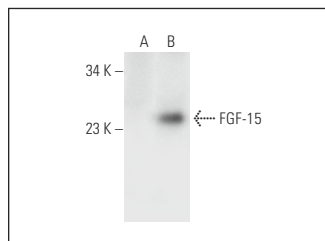
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



FGF-15 (G-5): sc-398338. Western blot analysis of FGF-15 expression in non-transfected: sc-117752 (A) and mouse FGF-15 transfected: sc-126850 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Xu, W., et al. 2016. Dihydroartemisinin protects against alcoholic liver injury through alleviating hepatocyte steatosis in a farnesoid X receptor-dependent manner. *Toxicol. Appl. Pharmacol.* 315: 23-34.
- Zhu, R., et al. 2017. Pectin penta-oligogalacturonide suppresses intestinal bile acids absorption and downregulates the FXR-FGF15 axis in high-cholesterol fed mice. *Lipids* 52: 489-498.
- Li, Q., et al. 2018. The ileal FGF15/19 to hepatic FGFR4 axis regulates liver regeneration after partial hepatectomy in mice. *J. Physiol. Biochem.* 74: 247-260.
- Huang, F., et al. 2019. Theabrownin from Pu-erh tea attenuates hypercholesterolemia via modulation of gut microbiota and bile acid metabolism. *Nat. Commun.* 10: 4971.
- Wei, M., et al. 2020. A dysregulated bile acid-gut microbiota axis contributes to obesity susceptibility. *EBioMedicine* 55: 102766.
- Luo, M., et al. 2021. Probiotics alleviated nonalcoholic fatty liver disease in high-fat diet-fed rats via gut microbiota/FXR/FGF15 signaling pathway. *J. Immunol. Res.* 2021: 2264737.
- Qiu, Y., et al. 2022. Ileal FXR-FGF15/19 signaling activation improves skeletal muscle loss in aged mice. *Mech. Ageing Dev.* 202: 111630.
- Huang, D., et al. 2024. *Ganoderma lucidum* polysaccharide ameliorates cholesterol gallstone formation by modulating cholesterol and bile acid metabolism in an FXR-dependent manner. *Chin. Med.* 19: 16.
- Li, C., et al. 2024. Gastrodin alleviates the deterioration of depressive-like behavior and glucolipid metabolism promoted by chronic stress in type 2 diabetic mice. *Eur. J. Pharmacol.* 973: 176582.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.