SANTA CRUZ BIOTECHNOLOGY, INC.

# Flg (C-15): sc-121

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 include the Flg receptor or FGFR-1, the Bek receptor or FGFR-2, FGFR-3, FGFR-4, FGFR-5 and FGFR-6. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The gene encoding human FLG maps to chromosome 8p11.23 and is alternatively spliced to produce several isoforms. Mutations in Flg are associated with Pfeiffer syndrome, a skeletal disorder characterized by craniosynostosis with deviation and enlargement of the thumbs and great toes, brachymesophalangy, with phalangeal ankylosis and a varying degree of soft tissue syndactyly. The Flg gene is also involved in chromosomal translocations with ZNF198, CEP110 and FOP, which may lead to stem cell leukemia lymphoma (SCLL).

## CHROMOSOMAL LOCATION

Genetic locus: FGFR1 (human) mapping to 8p11.23; Fgfr1 (mouse) mapping to 8 A2.

## SOURCE

Flg (C-15) is available as either rabbit (sc-121) or goat (sc-121-G) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of Flg of human origin.

## PRODUCT

Each vial contains either 100 µg (sc-121) or 200 µg (sc-121-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-121 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-121 AC, 500 µg/0.25 ml agarose in 1 ml.

## APPLICATIONS

Flg (C-15) is recommended for detection of Flg of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Flg (C-15) is also recommended for detection of Flg in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Flg siRNA (h): sc-29316, Flg siRNA (m): sc-29317, Flg shRNA Plasmid (h): sc-29316-SH, Flg shRNA Plasmid (m): sc-29317-SH, Flg shRNA (h) Lentiviral Particles: sc-29316-V and Flg shRNA (m) Lentiviral Particles: sc-29317-V.

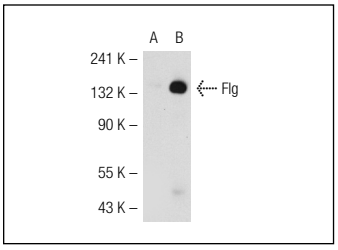
Molecular Weight (predicted) of Flg multiple isoforms: 7-92 kDa.

Molecular Weight (observed) of Flg isoforms: 48-140 kDa.

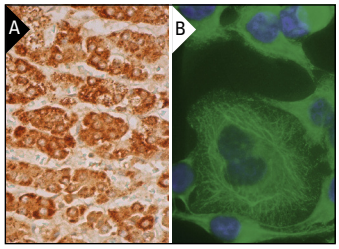
## STORAGE

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

## DATA




Flg (C-15): sc-121-G. Western blot analysis of Flg expression in non-transfected: sc-117752 (**A**) and human Flg transfected: sc-113615 (**B**) 293T whole cell lysates.




Flg (C-15): sc-121. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells (**A**). Immunofluorescence staining of methanol-fixed HeLa cells. Note specific cytoplasmic fluorescein immunostaining and nuclear DAPI counterstain (**B**).

## SELECT PRODUCT CITATIONS


1. Thompson, L.M., et al. 1997. Chimeras of the native form or achondroplasia mutant (G375C) of human fibroblast growth factor receptor 3 induce ligand dependent differentiation of PC-12 cells. Mol. Cell. Biol. 17: 4169-4177.
2. Lee, Y.W., et al. 2013. NGF-induced cell differentiation and gene activation is mediated by integrative nuclear FGFR1 signaling (INFS). PLoS ONE 8: e68931.
3. Ge, D., et al. 2013. Phosphorylation and nuclear translocation of integrin β4 induced by a chemical small molecule contribute to apoptosis in vascular endothelial cells. Apoptosis 18: 1120-1131.
4. Burbridge, M.F., et al. 2013. S49076 is a novel kinase inhibitor of MET, AXL, and FGFR with strong preclinical activity alone and in association with bevacizumab. Mol. Cancer Ther. 12: 1749-1762.
5. Bacchetta, J., et al. 2013. Fibroblast growth factor 23 inhibits extrarenal synthesis of 1,25-dihydroxyvitamin D in human monocytes. J. Bone Miner. Res. 28: 46-55.
6. Sosa Ldel, V., et al. 2013. Cooperative effect of E2 and FGF2 on lactotroph proliferation triggered by signaling initiated at the plasma membrane. Am. J. Physiol. Endocrinol. Metab. 305: E41-E49.


## RESEARCH USE

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