

# ACTR-IC (P-18): sc-54157

## BACKGROUND

ACTR-IC (activin receptor type 1C), also referred to as activin receptor-like kinase 7 (ALK-7), is a type I serine/threonine kinase receptor. ACTA-IC contains an extracellular binding domain, an intracellular serine/threonine kinase domain preceded by a GS box and a transmembrane domain. It is expressed throughout the digestive and central nervous system and localizes to the cell surface. Four ACTR-IC transcripts are generated by alternative splicing. Transcript 1 is the functional full length receptor, transcript 2 lacks a complete receptor binding domain and transcripts 3 and 4 are soluble proteins that lack a transmembrane domain. ACTR-IC is a receptor for activin AB, activin B and Nodal. In pancreatic cells, ACTR-IC forms a complex with activin receptor type IIB (ACTR-IIB). The kinase domain of ACTR-IC can induce Smad2 and Smad3 signalling pathways. In some cell lines, ACTR-IC overexpression induces apoptosis and inhibits proliferation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ACVR1C (human) mapping to 2q24.1.

## SOURCE

ACTR-IC (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of ACTR-IC of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54157 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ACTR-IC (P-18) is recommended for detection of ACTR-IC isoforms 1 and 4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

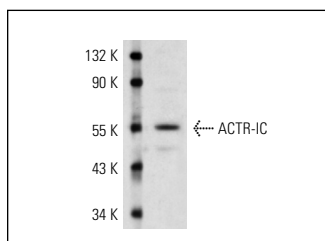
ACTR-IC (P-18) is also recommended for detection of ACTR-IC isoforms 1 and 4 in additional species, including equine, bovine and avian.

Suitable for use as control antibody for ACTR-IC siRNA (h): sc-72337, ACTR-IC shRNA Plasmid (h): sc-72337-SH and ACTR-IC shRNA (h) Lentiviral Particles: sc-72337-V.

Molecular Weight of ACTR-IC: 55 kDa.

Positive Controls: T84 whole cell lysate: sc-364797.

## DATA



ACTR-IC (P-18): sc-54157. Western blot analysis of ACTR-IC expression in T84 whole cell lysate.

## STORAGE

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

## RESEARCH USE

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

**MONOS**  
Satisfaction  
Guaranteed

Try **ACTR-IC (A-1): sc-374538** or **ACTR-IC (D-11): sc-376905**, our highly recommended monoclonal alternatives to ACTR-IC (P-18).