SANTA CRUZ BIOTECHNOLOGY, INC.

Ang-2 (F-18): sc-7017

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tie-1 and Tie-2 (also designated Tek) are novel cell surface receptor tyrosine kinases. The extracellular domain of Tie-1 has an unusual multidomain structure consisting of a cluster of three epidermal growth factor homology motifs localized between two immunoglobulin-like loops, which are followed by three Fibronectin type III repeats next to the transmembrane region. Angiopoietin-1 (Ang-1) is a secreted ligand for Tie-2. Preliminary biochemical analyses of Ang-1 reveal a potential Fibrinogen-like domain at the carboxy-terminus and coiled-coil regions in the amino-terminus. Ang-1 is an angiogenic factor that is thought to be involved in endothelial development. A related protein, angiopoietin-2 (Ang-2), has been identified as a naturally occurring antagonist of Ang-1 activation of Tie-2. In adult tissue, Ang-2 expression seems to be restricted to sites of vascular remodeling.

CHROMOSOMAL LOCATION

Genetic locus: ANGPT2 (human) mapping to 8p23.1; Angpt2 (mouse) mapping to 8 A1.3.

SOURCE

Ang-2 (F-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ang-2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7017 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ang-2 (F-18) is recommended for detection of precursor and mature Ang-2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ang-2 (F-18) is also recommended for detection of precursor and mature Ang-2 in additional species, including porcine.

Suitable for use as control antibody for Ang-2 siRNA (h): sc-39305, Ang-2 siRNA (m): sc-39306, Ang-2 shRNA Plasmid (h): sc-39305-SH, Ang-2 shRNA Plasmid (m): sc-39306-SH, Ang-2 shRNA (h) Lentiviral Particles: sc-39305-V and Ang-2 shRNA (m) Lentiviral Particles: sc-39306-V.

Molecular Weight of Ang-2 glycosylation: 62-70 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, TF-1 cell lysate: sc-2412 or ECV304 cell lysate: sc-2269.

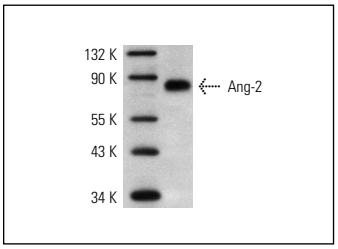
STORAGE

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

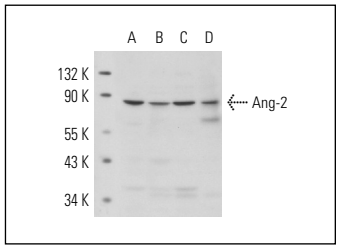
RESEARCH USE

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

DATA



Ang-2 (F-18): sc-7017. Western blot analysis of human recombinant Ang-2.



Ang-2 (F-18): sc-7017. Western blot analysis of Ang-2 expression in MIA PaCa-2 (**A**), HUV-EC-C (**B**), ECV304 (**C**) and TF-1 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

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5. Dore-Duffy, P., et al. 2007. Differential expression of capillary VEGF isoforms following traumatic brain injury. Neurol. Res. 29: 395-403.
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