Cytokeratin 23 (C-1): sc-365892

BACKGROUND

Cytokeratins comprise a diverse group of intermediate filament proteins that are expressed in both keratinized and non-keratinized epithelial tissue. The Cytokeratin proteins play a critical role in differentiation, as well as tissue specialization and function, and maintenance of the overall structural integrity of epithelial cells. There are two types of Cytokeratins, namely the type I Cytokeratins and the type II Cytokeratins. Cytokeratin 23, also known as KRT23, K23, CK23 or HAIK1, is a 422 amino acid intermediate filament protein that functions as a heterotrimer that is composed of 2 type I and 2 type II Cytokeratins. Characteristic of most Cytokeratins, Cytokeratin 23 is thought to participate in maintaining the structural integrity of a variety of cells. Cytokeratin 23 expression is induced in pancreatic cancer cells, suggesting a possible role in carcinogenesis.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: KRT23 (human) mapping to 17q21.2; Krtn23 (mouse) mapping to 11 D.

SOURCE

Cytokeratin 23 (C-1) is a mouse monoclonal antibody raised against amino acids 161-290 mapping within an internal region of Cytokeratin 23 of human origin.

PRODUCT

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

Cytokeratin 23 (C-1) is available conjugated to agarose (sc-365892 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365892 HRP), 200 μg/ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-365892 PE), fluorescein (sc-365892 FITC), Alexa Fluor® 488 (sc-365892 AF488), Alexa Fluor® 546 (sc-365892 AF546), Alexa Fluor® 594 (sc-365892 AF594) or Alexa Fluor® 647 (sc-365892 AF647), 200 μg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-365892 AF680) or Alexa Fluor® 790 (sc-365892 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Cytokeratin 23 (C-1) is recommended for detection of Cytokeratin 23 of mouse, rat and human 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 Cytokeratin 23 siRNA (h): sc-94056, Cytokeratin 23 siRNA (m): sc-142763, Cytokeratin 23 shRNA Plasmid (h): sc-94056-SH, Cytokeratin 23 shRNA Plasmid (m): sc-142763-SH, Cytokeratin 23 shRNA (h) Lentiviral Particles: sc-94056-V and Cytokeratin 23 shRNA (m) Lentiviral Particles: sc-142763-V.

Molecular Weight of Cytokeratin 23: 48 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, F9 cell lysate: sc-2245 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516141 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS


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.