

# Endo180 (B-10): sc-271148

## BACKGROUND

Endo180 (endocytic receptor 180), also known as macrophage mannose receptor C type 2 (MRC2), urokinase plasminogen activator receptor-associated protein (uPARAP) or CD280 antigen, is a ubiquitously expressed, type I membrane protein with predominant expression in fetal lung and kidney. The extracellular domain of Endo180 contains a fibronectin type II domain, eight C-type lectin domains and a cysteine-rich domain. Endo180 functions as a cell surface receptor and mediates collagen matrix remodeling as well as cell migration by playing a role in the uptake and lysosomal degradation of collagen. Endo180 can bind to gelatin and collagens I, II, IV and V. It may play a role in wound regeneration. In addition, Endo180 can form a complex with uPAR and pro-uPA, thereby partaking in a variety of cellular proteolytic and signaling functions. Endo180 participates in the destruction of connective tissue during the progression of head and neck squamous cell carcinoma.

## CHROMOSOMAL LOCATION

Genetic locus: MRC2 (human) mapping to 17q23.2.

## SOURCE

Endo180 (B-10) is a mouse monoclonal antibody raised against amino acids 1051-1350 mapping within an extracellular domain of Endo180 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Endo180 (B-10) is available conjugated to agarose (sc-271148 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271148 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271148 PE), fluorescein (sc-271148 FITC), Alexa Fluor® 488 (sc-271148 AF488), Alexa Fluor® 546 (sc-271148 AF546), Alexa Fluor® 594 (sc-271148 AF594) or Alexa Fluor® 647 (sc-271148 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271148 AF680) or Alexa Fluor® 790 (sc-271148 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Endo180 (B-10) is recommended for detection of endocytic receptor 180 of 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 Endo180 siRNA (h): sc-62276, Endo180 shRNA Plasmid (h): sc-62276-SH and Endo180 shRNA (h) Lentiviral Particles: sc-62276-V.

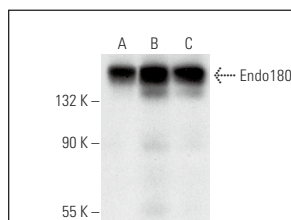
Molecular Weight of Endo180: 180 kDa.

Positive Controls: U-2 OS cell lysate: sc-2295, MG-63 whole cell lysate: sc-364784 or HOS cell lysate: sc-2275.

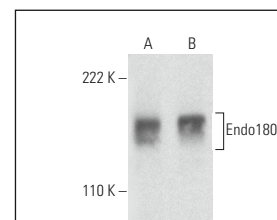
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



Endo180 (B-10): sc-271148. Western blot analysis of Endo180 expression in MG-63 (A), HOS (B) and U-2 OS (C) whole cell lysates.



Endo180 (B-10): sc-271148. Western blot analysis of Endo180 expression in A-673 (A) and SJRH30 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Tang, S., et al. 2013. UV-mediated downregulation of the endocytic collagen receptor, Endo180, contributes to accumulation of extracellular collagen fragments in photoaged skin. *J. Dermatol. Sci.* 70: 42-48.
2. Sun, H., et al. 2021. Dissecting the heterogeneity and tumorigenesis of BRCA1 deficient mammary tumors via single cell RNA sequencing. *Theranostics* 11: 9967-9987.
3. Togashi, K., et al. 2022. Non-triple helical form of type IV collagen  $\alpha 1$  chain suppresses vascular endothelial-cadherin mediated cell-to-cell junctions. *J. Biochem.* 172: 165-175.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.