**BACKGROUND**

ADAMs (a disintegrin and metalloprotease domain), also known as MDCs (metalloprotease, disintegrin, and cysteinerich domain) or cellular disintegrins, are a family of proteins that are expressed in numerous different tissues. They catalyze proteolysis, adhesion, fusion and intracellular signaling. ADAMs are membrane-anchored, glycosylated, Zn\(^{2+}\) dependent proteases and there are over 30 different members in the family with many diverse functions. ADAM3, also called cyritestin, is exclusively expressed on the surface of sperm. In the early development of sperm, ADAM3 forms a complex with ADAM2. Disruption of this complex can impair the function and structure of ADAM3. ADAM3 plays a significant role in sperm-oocyte binding. Sperm lacking functional ADAM3 cannot bind to the zona pellucida and fertilization cannot take place.

**CHROMOSOMAL LOCATION**

Genetic locus: ADAM33 (human) mapping to 20p13; Adam3 (mouse) mapping to 8 A2.

**SOURCE**

ADAM3 (F-4) is a mouse monoclonal antibody raised against amino acids 461-595 mapping within an internal region of ADAM3 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG\(_1\), kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADAM3 (F-4) is available conjugated to agarose (sc-365288 AC), 500 µg/ml 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365288 HRP), 200 µg/ml, for WB, HIC(P) and ELISA; to either phycoerythrin (sc-365288 PE), fluorescein (sc-365288 FITC), Alexa Fluor® 488 (sc-365288 AF488), Alexa Fluor® 546 (sc-365288 AF546), Alexa Fluor® 594 (sc-365288 AF594) or Alexa Fluor® 647 (sc-365288 AF647), 200 µg/ml, for WB (RGB), IF, HIC(P) and FCM; and to either Alexa Fluor® 680 (sc-365288 AF680) or Alexa Fluor® 790 (sc-365288 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

ADAM3 (F-4) is recommended for detection of ADAM3 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 1:300-1:3000).


Positive Controls: mouse testis extract: sc-2405 or rat testis extract: sc-2400.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

![Image of Western Blot Analysis](attachment:image)

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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