

ADAM8 (F-5): sc-374421

BACKGROUND

ADAM (a disintegrin and metalloprotease) proteins are a family of over 30 membrane-anchored, glycosylated, Zn^{2+} dependent proteases that are involved in cell-cell, cell-matrix interface related processes including fertilization, muscle fusion, secretion of TNF α and modulation of the neurogenic function of Notch and Delta. ADAM proteins possess a signal-domain, a pro-domain, a metalloprotease domain, a disintegrin domain (Integrin ligand), a cysteine-rich region, an epidermal growth factor-like domain, a transmembrane domain and a cytoplasmic tail. ADAMs are expressed in brain, testis, epididymis, ovary, breast, placenta, liver, heart, lung, bone and muscle, and catalyze proteolysis, adhesion, fusion, and intracellular signaling. ADAM8 (CD156, MS2) is a 824 amino acid protein that contains a 16 amino acid signal peptide, a 637 amino acid extracellular region, a 25 amino acid transmembrane region and a 146 amino acid cytoplasmic region which possesses a cytoplasmic consensus Src homology 3 (SH3)-binding domain.

REFERENCES

1. Yoshida, S., et al. 1990. Molecular cloning of cDNA encoding MS2 antigen, a novel cell surface antigen strongly expressed in murine monocytic lineage. *Int. Immunol.* 2: 585-591.
2. Wolfsberg, T.G., et al. 1995. ADAM, a novel family of membrane proteins containing a disintegrin and metalloprotease domain: multipotential functions in cell-cell and cell-matrix interactions. *J. Cell Biol.* 131: 275-278.
3. Yoshiyama, K., et al. 1997. CD156 (human ADAM8): expression, primary amino acid sequence, and gene location. *Genomics* 41: 56-62.
4. Stone, A.L., et al. 1999. Structure-function analysis of the ADAM family of disintegrin-like and metalloproteinase-containing proteins (review). *J. Protein Chem.* 18: 447-465.

CHROMOSOMAL LOCATION

Genetic locus: ADAM8 (human) mapping to 10q26.3.

SOURCE

ADAM8 (F-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 17-53 near the N-terminus of ADAM8 of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADAM8 (F-5) is available conjugated to agarose (sc-374421 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374421 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374421 PE), fluorescein (sc-374421 FITC), Alexa Fluor[®] 488 (sc-374421 AF488), Alexa Fluor[®] 546 (sc-374421 AF546), Alexa Fluor[®] 594 (sc-374421 AF594) or Alexa Fluor[®] 647 (sc-374421 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374421 AF680) or Alexa Fluor[®] 790 (sc-374421 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374421 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ADAM8 (F-5) is recommended for detection of ADAM8 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for ADAM8 siRNA (h): sc-41406, ADAM8 shRNA Plasmid (h): sc-41406-SH and ADAM8 shRNA (h) Lentiviral Particles: sc-41406-V.

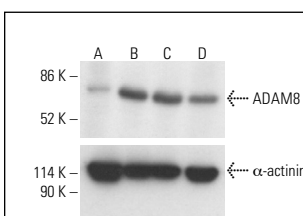
Molecular Weight of ADAM8: 89 kDa.

Positive Controls: chemically-treated Hep G2 whole cell lysate.

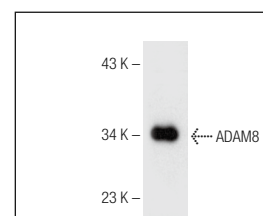
RECOMMENDED SUPPORT REAGENTS

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



ADAM8 (F-5): sc-374421. Western blot analysis of ADAM8 expression in untreated (A) and chemically-treated (B, C, D) Hep G2 whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409. α -actinin (H-2): sc-17829 used as loading control. Detection reagent used: m-IgG $_1$ BP-HRP: sc-525408.



ADAM8 (F-5): sc-374421. Western blot analysis of human recombinant ADAM8.

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 for detailed protocols and support products.

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