

HM74A (h3): 293T Lysate: sc-112381

BACKGROUND

HM74, also known as PUMAG or Puma- γ , is a member of the G protein coupled receptor (GPCR) superfamily. In humans, HM74 is encoded by two different genes (GPR109A and GPR109B) that produce proteins, namely HM74A and HM74 (or HM74B), which are 96% homologous. In mice and rats, only one gene encodes the HM74 protein (Gpr109a). HM74 is a G_i protein-coupled receptor that mediates the metabolic effects of nicotinic acid. Localizing to the cell membrane, HM74 is highly expressed in adipocytes, immune cells and spleen. Like all members of the GPCR superfamily, HM74 contains seven transmembrane domains. HM74 lacks the N-linked glycosylation sites near the N-terminus that are present in other GPCR family members. Furthermore, HM74 shows a more diverged amino acid sequence homology from most family members, implying different ligand specificity.

REFERENCES

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5. Zellner, C., et al. 2005. Variations in human HM74 (GPR109B) and HM74A (GPR109A) niacin receptors. *Hum. Mutat.* 25: 18-21.
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8. Soudijn, W., et al. 2007. Nicotinic acid receptor subtypes and their ligands. *Med. Res. Rev.* 27: 417-433.
9. Kostylina, G., et al. 2008. Neutrophil apoptosis mediated by nicotinic acid receptors (GPR109A). *Cell Death Differ.* 15: 134-142.

CHROMOSOMAL LOCATION

Genetic locus: HCAR2 (human) mapping to 12q24.31.

PRODUCT

HM74A (h3): 293T Lysate represents a lysate of human HM74 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

HM74A (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive HM74 antibodies. Recommended use: 10-20 μ l per lane.

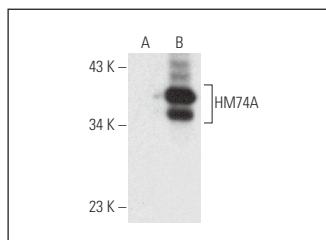
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HM74 (D-8): sc-377292 is recommended as a positive control antibody for Western Blot analysis of enhanced human HM74 expression in HM74 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

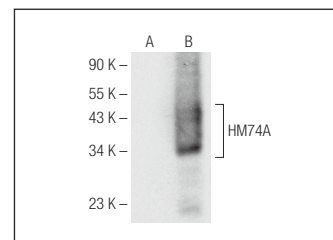
RECOMMENDED SUPPORT REAGENTS

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.

DATA



HM74 (D-8): sc-377292. Western blot analysis of HM74A expression in non-transfected: sc-117752 (A) and human HM74A transfected: sc-112381 (B) 293T whole cell lysates.



HM74 (A-11): sc-373932. Western blot analysis of HM74A expression in non-transfected: sc-117752 (A) and human HM74A transfected: sc-112381 (B) 293T whole cell lysates.

PROTOCOLS

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