

# Acpr30 (hBA-145): sc-4862

## BACKGROUND

Acpr30 (adipocyte complement-related protein of 30 kDa or AdipoQ), is a secretory protein that is made exclusively in adipocytes and whose mRNA is induced over 100-fold during adipocyte differentiation. Acpr30 is an abundant serum protein, secreted exclusively from fat cells, and is implicated in energy homeostasis and obesity. Due to the dysregulation in various forms of obesity in humans and mice and its strong structural similarity to TNF $\alpha$ , it is currently under study as an important molecule involved in whole body energy homeostasis. In addition, regulated exocytosis of Acpr30 appears to require phosphatidylinositol-3-kinase activity, since insulin-stimulated Acpr30 secretion is blocked by pharmacologic inhibitors of this enzyme.

## REFERENCES

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## SOURCE

Acpr30 (hBA-145) is produced in *E. coli* as 16.6 kDa biologically active protein corresponding to 145 amino acids of Acpr30 of human origin.

## PRODUCT

Acpr30 (hBA-145) is purified from bacterial lysates (>98%); supplied as 25  $\mu$ g purified protein.

## PROTOCOLS

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

## BIOLOGICAL ACTIVITY

Acpr30 (hBA-145) is biologically active as determined by its ability to inhibit the proliferation of murin myeloid cell lines M1.

Expected ED<sub>50</sub>: < 3  $\mu$ g/ml, corresponding to a specific activity of  $3.3 \times 10^5$  units/mg.

## RECONSTITUTION

In order to avoid freeze/thaw damaging of the active protein, dilute protein when first used to desired working concentration. Either a sterile filtered standard buffer (such as 50mM TRIS or 1X PBS) or water can be used for the dilution. Store any thawed aliquot in refrigeration at 2° C to 8° C for up to four weeks, and any frozen aliquot at -20° C to -80° C for up to one year. It is recommended that frozen aliquots be given an amount of standard cryopreservative (such as Ethylene Glycol or Glycerol 5-20% v/v), and refrigerated samples be given an amount of carrier protein (such as heat inactivated FBS or BSA to 0.1% v/v) or non-ionic detergent (such as Triton X-100 or Tween 20 to 0.005% v/v), to aid stability during storage.

## STORAGE

Store desiccated at -20° C; stable for one year from the date of shipment.

## RESEARCH USE

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