



## resistin (hBA-92): sc-4866

### BACKGROUND

The 12.5 kDa cysteine-rich, adipose tissue-specific, secretory factor resistin (resistance to insulin, also known as ADSF) is a secreted hormone that potentially links obesity to diabetes. Resistin is rich in serine and cysteine residues and contains a unique cysteine repeat motif. Resistin and the resistin-like molecules share the characteristic cysteine composition and other signature features. Resistin-like  $\alpha$  is a secreted protein that has restricted tissue distribution and is most highly expressed in adipose tissue. Another family member, Resistin-like  $\beta$ , is a secreted protein expressed only in the gastrointestinal tract, particularly in the colon, in both mouse and human. Resistin-like  $\beta$  expression is highest in proliferative epithelial cells and is markedly increased in tumors, suggesting a role in intestinal proliferation.

### REFERENCES

1. Kim, K.H., Lee, K., Moon, Y.S., and Sul, H.S. 2001. A cysteine-rich adipose tissue-specific secretory factor inhibits adipocyte differentiation. *J. Biol. Chem.* 276: 11252-11256.
2. Dove, A. 2001. Resistin diabetes. *Nat. Biotechnol.* 19: 217.
3. Flier, J.S. 2001. Diabetes. The missing link with obesity? *Nature* 409: 292-293.
4. Steppan, C.M., Bailey, S.T., Bhat, S., Brown, E.J., Banerjee, R.R., Wright, C.M., Patel, H.R., Ahima, R.S., and Lazar, M.A. 2001. The hormone resistin links obesity to diabetes. *Nature* 409: 307-312.
5. Steppan, C.M., Brown, E.J., Wright, C.M., Bhat, S., Banerjee, R.R., Dai, C.Y., Enders, G.H., Silberg, D.G., Wen, X., Wu, G.D., and Lazar, M.A. 2001. A family of tissue-specific resistin-like molecules. *Proc. Natl. Acad. Sci. USA* 98: 502-506.
6. Vendrell, J., Broch, M., Vilarrasa, N., Molina, A., Gomez, J.M., Gutierrez, C., Simon, I., Soler, J., and Richart, C. 2004. Resistin, adiponectin, ghrelin, leptin, and proinflammatory cytokines: relationships in obesity. *Obes. Res.* 12: 962-971.
7. Patel, S.D., Rajala, M.W., Rossetti, L., Scherer, P.E., and Shapiro, L. 2004. Disulfide-dependent multimeric assembly of resistin family hormones. *Science* 304: 1154-1158.
8. Steppan, C.M. and Lazar, M.A. 2004. The current biology of resistin. *J. Intern. Med.* 255: 439-447.
9. Banerjee, R.R., Rangwala, S.M., Shapiro, J.S., Rich, A.S., Rhoades, B., Qi, Y., Wang, J., Rajala, M.W., Poci, A., Scherer, P.E., Steppan, C.M., Ahima, R.S., Obici, S., Rossetti, L., and Lazar, M.A. 2004. Regulation of fasted blood glucose by resistin. *Science* 303: 1195-1198.
10. Sul HS. 2004. Resistin/ADSF/FIZZ3 in obesity and diabetes. *Trends Endocrinol. Metab.* 15: 247-249.

### SOURCE

resistin (hBA-92) is produced in *E. coli* as 19.5 kDa biologically active protein corresponding to 92 amino acids of resistin of human origin.

### PRODUCT

resistin (hBA-92) is purified from bacterial lysates (>98%); supplied as 25  $\mu$ g purified protein.

### 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.

### PROTOCOLS

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