# Abp1 (m): 293T Lysate: sc-118172



The Power to Question

## **BACKGROUND**

Amiloride-binding protein 1, amine oxidase, copper-containing (Abp1), also known as diamine oxidase (DAO), is a member of the copper/topaquinone oxidase family. The human homolog is known as kidney amine oxidase (KAO), DAO or ABP1. Notable compounds degraded by Abp1 include putrescine, histamine, spermine and spermidine, as well as substances involved in allergic and immune responses, cell proliferation, tissue differentiation, tumor formation and possibly apoptosis. The secreted Abp1 protein can be detected in the extracellular space of placenta and kidney. Placental Abp1 is thought to play a role in the regulation of female reproductive function.

## **REFERENCES**

- Valette, G., Cohen, Y. and Burkard, W. 1954. Intracellular distribution of diamine oxidase (histaminase) in the pig kidney. C.R. Seances Soc. Biol. Fil. 148: 1762-1764.
- 2. Kapeller-Adler, R. and Macfarlane H. 1963. Purification and identification of hog-kidney histaminase. Biochim. Biophys. Acta 67: 542-565.
- 3. Bardsley, W.G., Crabbe, M.J., Shindler, J.S. and Ashford J.S. 1972. Oxidation of p-dimethylaminomethylbenzylamine by pig kidney diamine oxidase. A new method for spectrophotometric assay. Biochem. J. 127: 875-879.
- Matsumoto, T., Furuta, T., Nimura, Y. and Suzuki, O. 1984. 3-(p-hydrox-yphenyl)propionic acid as a new fluorogenic reagent for amine oxidase assays. Anal. Biochem. 138: 133-136.
- Silva, I.J., Azevedo, M.S. and Manso, C.F. 1996. Superoxide anion radical generation during the oxidation of various amines by diamine oxidase. Free Radic. Res. 24: 167-175.
- Gokturk, C., Nordquist, J., Sugimoto, H., Forsberg-Nilsson, K., Nilsson, J. and Oreland, L. 2004. Semicarbazide-sensitive amine oxidase in transgenic mice with diabetes. Biochem. Biophys. Res. Commun. 325: 1013-1020.
- Stolen, C.M., Madanat, R., Marti, L., Kari, S., Yegutkin, G.G., Sariola, H., Zorzano, A. and Jalkanen, S. 2004. Semicarbazide sensitive amine oxidase over-expression has dual consequences: Insulin mimicry and diabetes-like complications. FASEB J. 18: 702-704.
- 8. Mura, A., Padiglia, A., Medda, R., Pintus, F., Finazzi Agrò, A. and Floris G. 2006. Properties of copper-free pig kidney amine oxidase: role of topa quinone. FEBS Lett. 580: 4317-4324.
- 9. Mura, A., Anedda, R., Pintus, F., Casu, M., Padiglia, A., Floris, G. and Medda, R. 2007. An important lysine residue in copper/quinone-containing amine oxidases. FEBS J. 274: 2585-2595.

## CHROMOSOMAL LOCATION

Genetic locus: Abp1 (mouse) mapping to 6 B2.3.

## **PRODUCT**

Abp1 (m): 293T Lysate represents a lysate of mouse Abp1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### **APPLICATIONS**

Abp1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Abp1 antibodies. Recommended use: 10-20 µl per lane.

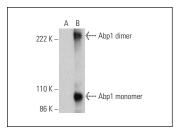
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Abp1 (G-11): sc-515908 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Abp1 expression in Abp1 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-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**



Abp1 (G-11): sc-515908. Western blot analysis of Abp1 expression in non-transfected: sc-117752 (**A**) and mouse Abp1 transfected: sc-118172 (**B**) 293T whole cell lysates.

## **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.

## **PROTOCOLS**

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

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