



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



IMPDH2 (m): 293T Lysate: sc-121059

BACKGROUND

IMPDH2 (inosine monophosphate dehydrogenase 2), also known as IMPD2, is a 514 amino acid protein that contains 2 CBS domains and is involved in purine metabolism. Existing as a homotetramer, IMPDH2 uses potassium as a cofactor to catalyze the rate-limiting step in the synthesis of guanine nucleotides, thus maintaining cellular guanine deoxy- and ribonucleotide pools needed for DNA and RNA synthesis, as well as playing a crucial role in the regulation of cell growth. Due to its ability to mediate cell growth, when overexpressed IMPDH2 may be involved in malignant transformation. The gene encoding IMPDH2 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- Collart, F.R. and Huberman, E. 1988. Cloning and sequence analysis of the human and Chinese hamster inosine-5'-monophosphate dehydrogenase cDNAs. *J. Biol. Chem.* 263: 15769-15772.
- Natsumeda, Y., Ohno, S., Kawasaki, H., Konno, Y., Weber, G. and Suzuki, K. 1990. Two distinct cDNAs for human IMP dehydrogenase. *J. Biol. Chem.* 265: 5292-5295.
- Glesne, D., Collart, F., Varkony, T., Drabkin, H. and Huberman, E. 1993. Chromosomal localization and structure of the human type II IMP dehydrogenase gene (IMPDH2). *Genomics* 16: 274-277.
- Carr, S.F., Papp, E., Wu, J.C. and Natsumeda, Y. 1993. Characterization of human type I and type II IMP dehydrogenases. *J. Biol. Chem.* 268: 27286-27290.
- Hager, P.W., Collart, F.R., Huberman, E. and Mitchell, B.S. 1995. Recombinant human inosine monophosphate dehydrogenase type I and type II proteins. Purification and characterization of inhibitor binding. *Biochem. Pharmacol.* 49: 1323-1329.
- Zimmermann, A.G., Spychala, J. and Mitchell, B.S. 1995. Characterization of the human inosine-5'-monophosphate dehydrogenase type II gene. *J. Biol. Chem.* 270: 6808-6814.
- Colby, T.D., Vanderveen, K., Strickler, M.D., Markham, G.D. and Goldstein, B.M. 1999. Crystal structure of human type II inosine monophosphate dehydrogenase: implications for ligand binding and drug design. *Proc. Natl. Acad. Sci. USA* 96: 3531-3536.
- Peñuelas, S., Noé, V. and Ciudad, C.J. 2005. Modulation of IMPDH2, survivin, topoisomerase I and vimentin increases sensitivity to methotrexate in HT29 human colon cancer cells. *FEBS J.* 272: 696-710.
- Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 146691. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Impdh2 (mouse) mapping to 9 F2.

RESEARCH USE

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

PRODUCT

IMPDH2 (m): 293T Lysate represents a lysate of mouse IMPDH2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

IMPDH2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IMPDH2 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.

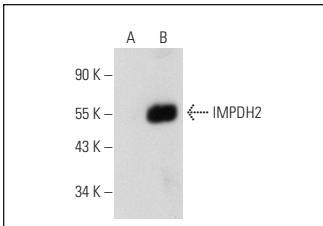
IMPDH (F-6): sc-166551 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse IMPDH2 expression in IMPDH2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG_x BP-HRP: sc-516102 or m-IgG_x 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



IMPDH (F-6): sc-166551. Western blot analysis of IMPDH2 expression in non-transfected: sc-117752 (**A**) and mouse IMPDH2 transfected: sc-121059 (**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.

PROTOCOLS

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