



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# IDO (m): 293T Lysate: sc-120945

## BACKGROUND

Indoleamine 2,3-dioxygenase (IDO) is an IFN- $\gamma$ -inducible enzyme that catalyzes the degradation of the essential amino acid L-tryptophan to N-formylkynurenine. The gene encoding human IDO maps to chromosome 8p11.22. IDO, also known as INDO, is an important modulator of immunological responses and protects allogeneic concepti from alloreactive maternal lymphocytes. IDO mediates an interesting inhibitory effect of HeLa cells co-cultured with human PBLs; the ILN-2-induced proliferation response of PBLs is diminished in the presence of HeLa cells while an IDO inhibitor negates this effect. Flow cytometric analysis indicates both mature and immature CD123-positive dendritic cells suppress T cell activity using IDO. IDO-transfected cells co-cultured with T cells reduces T cell proliferation. Additionally, adopted transfer of donor T cells reduces donor T cell numbers in IDO-transgenic mice. The pharmacological or genetic manipulation of IDO may be useful for suppressing undesirable T cell response.

## REFERENCES

1. Dai, W. and Gupta, S.L. 1990. Molecular cloning, sequencing and expression of human interferon- $\gamma$ -inducible indoleamine 2,3-dioxygenase cDNA. *Biochem. Biophys. Res. Commun.* 168: 1-8.
2. Najfeld, V., Menninger, J., Muhleman, D., Comings, D.E. and Gupta, S.L. 1993. Localization of indoleamine 2,3-dioxygenase gene (INDO) to chromosome 8p12→p11 by fluorescent *in situ* hybridization. *Cytogenet. Cell Genet.* 64: 231-232.
3. Munn, D.H., Zhou, M., Attwood, J.T., Bondarev, I., Conway, S.J., Marshall, B., Brown, C. and Mellor, A.L. 1998. Prevention of allogeneic fetal rejection by tryptophan catabolism. *Science* 281: 1191-1193.
4. Logan, G.J., Smyth, C.M., Earl, J.W., Zaikina, I., Rowe, P.B., Smythe, J.A. and Alexander, I.E. 2002. HeLa cells cocultured with peripheral blood lymphocytes acquire an immuno-inhibitory phenotype through up-regulation of indoleamine 2,3-dioxygenase activity. *Immunology* 105: 478-487.
5. Mellor, A.L., Keskin, D.B., Johnson, T., Chandler, P. and Munn, D.H. 2002. Cells expressing indoleamine 2,3-dioxygenase inhibit T cell responses. *J. Immunol.* 168: 3771-3776.

## CHROMOSOMAL LOCATION

Genetic locus: Ido1 (mouse) mapping to 8 A2.

## PRODUCT

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

## STORAGE

Store at -20 $^{\circ}$  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](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

IDO (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IDO antibodies. Recommended use: 10-20  $\mu$ l per lane.

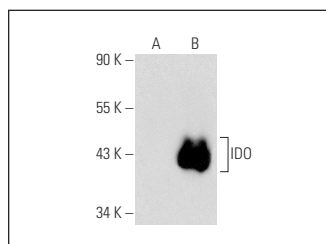
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IDO (E-7): sc-365086 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse IDO expression in IDO transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

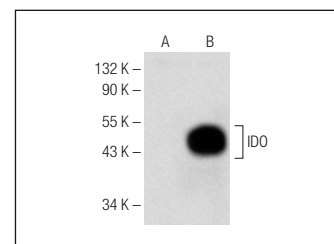
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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



IDO (E-7): sc-365086. Western blot analysis of IDO expression in non-transfected: sc-117752 (A) and mouse IDO transfected: sc-120945 (B) 293T whole cell lysates.



IDO (E-11): sc-365517. Western blot analysis of IDO expression in non-transfected: sc-117752 (A) and mouse IDO transfected: sc-120945 (B) 293T whole cell lysates.

## RESEARCH USE

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