

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	IDO, Human, pAb	Expiry date	-
Catalog number	HP5004-20UG	Amount	20 µg
Lot number	-	Concentration	100 µg/ml
Volume	200 µl	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Purification	Protein A
Host species	Sheep Ig		
Endotoxin	N.A.		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes		•	•	•		•		•
No								
N.D.	•				•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: HP5004 can be used as detection antibody.
- FC: For flow cytometry, it is recommended that the polyclonal antibody is used in combination with fixing and permeabilisation.

General Information

Description	The polyclonal antibody recognizes human indoleamine 2,3-dioxygenase (IDO). IDO is an intracellular heme-containing enzyme that catalyzes the oxidative cleavage of the indole ring of several important regulatory molecules, like tryptophan, serotonin and melatonin. By doing this, IDO initiates the production of biologically active metabolites, commonly referred to as kynurenines. IDO is widely expressed in a variety of human tissues as well as in macrophages and dendritic cells (DCs). In inflammation, interferons (IFNs) act on specific receptors to trigger IDO induction. The production of IFN-gamma and induction of IDO represent important antimicrobial mechanisms. Degradation and depletion of tryptophan by IDO inhibits the growth of viruses, bacteria and parasites. Furthermore, IDO plays a complex and crucial role in immunoregulation during infection, pregnancy, autoimmunity, transplantation, and neoplasia. By local depletion of tryptophan and increasing proapoptotic kynurenines, IDO greatly affects T-cell proliferation and survival, both in vitro and in vivo, and also affects B-cell and NK-cell function and survival. There is a central role for IDO expression in tolerance involving regulatory cells and DCs. IDO acts as an intermediate pathway in LPS-induced production of reactive oxygen species and NF-kappaB activation, two processes that lead to DC maturation. The polyclonal antibody is obtained after immunization of sheep with recombinant IDO. Reactivity of the polyclonal antibody with IDO has been confirmed on immuno blot with IFN-gamma stimulated human peripheral blood lymphocytes.
Aliases	Indoleamine-pyrrole 2,3 dioxygenase
References	<ol style="list-style-type: none"> Grohmann, U et al; Tolerance, DCs and tryptophan: much ado about IDO. Trends Immunol 2003, 24: 242 Royer, P et al; The Mannose Receptor Mediates the Uptake of Diverse Native Allergens by Dendritic Cells and Determines Allergen-Induced T Cell Polarization through Modulation of IDO Activity. J Immunol 2010, 185:1522
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Brenda Teunissen

Date
13/01/2021

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.