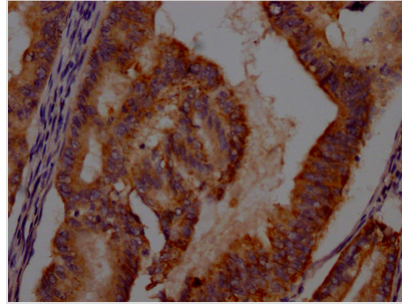




IDO1 Antibody

Product Code	CSB-RA215054A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14902
Immunogen	A synthesized peptide derived from human INDO
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	<p>Catalyzes the first and rate limiting step of the catabolism of the essential amino acid tryptophan along the kynurenine pathway (PubMed:17671174). Involved in the peripheral immune tolerance, contributing to maintain homeostasis by preventing autoimmunity or immunopathology that would result from uncontrolled and overreacting immune responses (PubMed:25691885). Tryptophan shortage inhibits T lymphocytes division and accumulation of tryptophan catabolites induces T-cell apoptosis and differentiation of regulatory T-cells (PubMed:25691885). Acts as a suppressor of anti-tumor immunity (PubMed:23103127, PubMed:25157255, PubMed:14502282, PubMed:25691885). Limits the growth of intracellular pathogens by depriving tryptophan (PubMed:25691885). Protects the fetus from maternal immune rejection (PubMed:25691885).</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Metabolism; Signal transduction
Gene Names	IDO1
Accession NO.	9E5
Image	



IHC image of CSB-RA215054A0HU diluted at 1:100 and staining in paraffin-embedded human endometrial cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

IDO1 is a heme enzyme that catalyzes the oxidation of L-tryptophan (L-Trp) into kynurenine metabolites, the buildup of which causes T-cell suppression and allows tumor cells to evade immune system monitoring and clearance. In vitro, IDO1 has been demonstrated to block T cell activation and promote the formation of T regulatory cells. In vivo, IDO1 is well known for facilitating tumor immune evasion through its immunoregulatory role. IDO1 is significantly expressed in a number of malignancies, including colorectal cancer, breast cancer, and esophageal carcinoma, and its overexpression has been linked to a bad prognosis in various cancers.

Genes for IDO1 antibody's heavy and light chains were cloned into plasma vectors, which were subsequently transfected into mammalian cells for expression. The resulting product is the recombinant IDO1 antibody. This recombinant IDO1 antibody was subsequently purified from the culture medium of transfected host cell lines through A synthesized peptide derived from human INDO. It has verified to detect IDO1 protein Human in the ELISA, IHC.