

## Product datasheet for **UM500091CF**

### **IDO1 Mouse Monoclonal Antibody [Clone ID: UMAB126]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	UMAB126
<b>Applications:</b>	10k-ChIP, IF, IHC, WB
<b>Recommended Dilution:</b>	IHC 1:100~200
<b>Reactivity:</b>	Human
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human IDO1(NP_002155) produced in HEK293T cell.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	45.1 kDa
<b>Gene Name:</b>	indoleamine 2,3-dioxygenase 1
<b>Database Link:</b>	<a href="#">NP_002155</a> <a href="#">Entrez Gene 3620 Human</a> <a href="#">P14902</a>



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**Background:**

This gene encodes indoleamine 2,3-dioxygenase (IDO) - a heme enzyme that catalyzes the first and rate-limiting step in tryptophan catabolism to N-formyl-kynurenine. This enzyme acts on multiple tryptophan substrates including D-tryptophan, L-tryptophan, 5-hydroxy-tryptophan, tryptamine, and serotonin. This enzyme is thought to play a role in a variety of pathophysiological processes such as antimicrobial and antitumor defense, neuropathology, immunoregulation, and antioxidant activity. Through its expression in dendritic cells, monocytes, and macrophages this enzyme modulates T-cell behavior by its peri-cellular catabolization of the essential amino acid tryptophan. [provided by RefSeq, Feb 2011]

**Synonyms:**

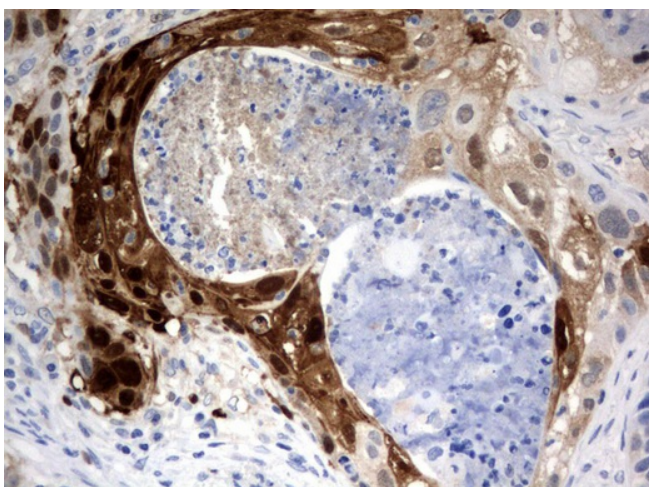
IDO; IDO-1; INDO

**Protein Families:**

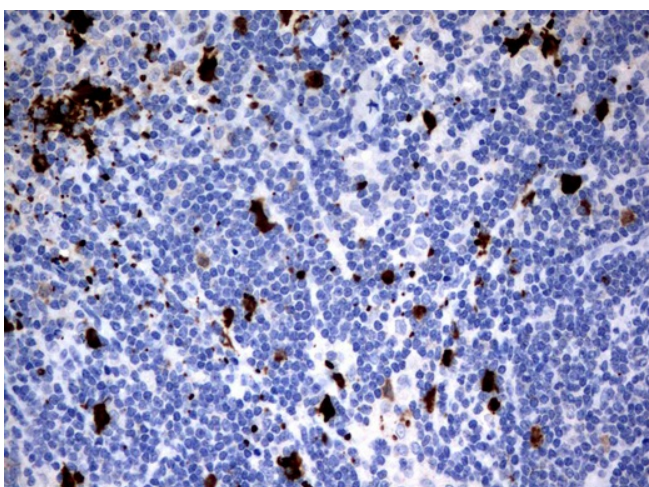
Druggable Genome

**Protein Pathways:**

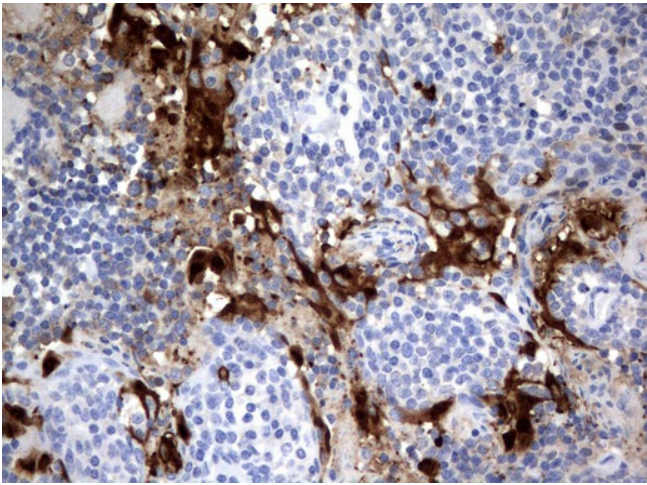
Metabolic pathways, Tryptophan metabolism

**Product images:**

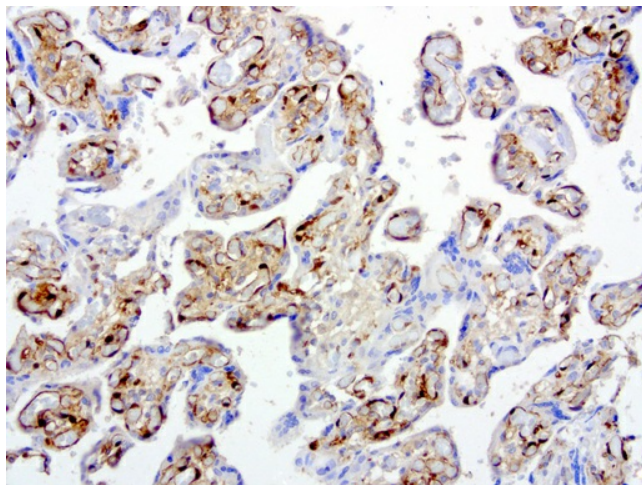
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-IDO1 mouse monoclonal antibody. ([UM500091]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



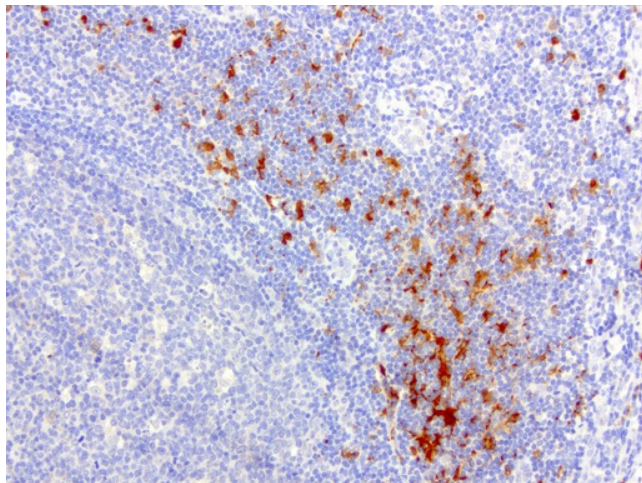
Immunohistochemical staining of paraffin-embedded Human lymph node tissue using anti-IDO1 mouse monoclonal antibody. ([UM500091]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



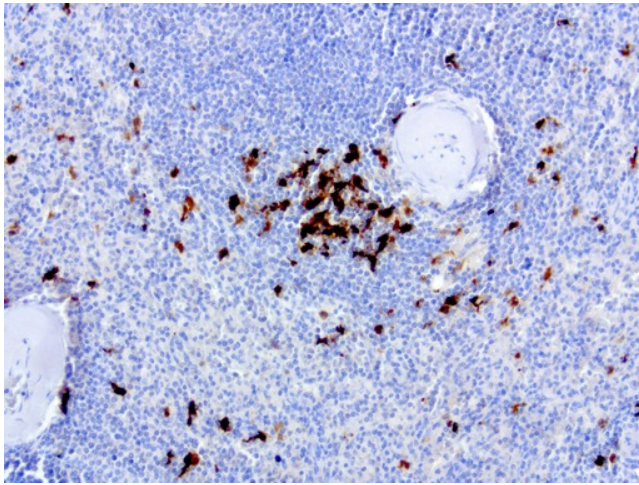
Immunohistochemical staining of paraffin-embedded Human tonsil using anti-IDO1 mouse monoclonal antibody. ([UM500091]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



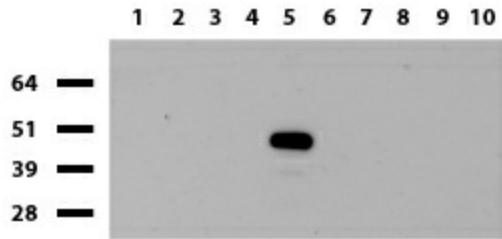
Immunohistochemical staining of paraffin-embedded human placenta using anti-IDO1 clone UMAB126 mouse monoclonal antibody at 1:200 dilution of 1.0 mg/mL using Polink2 Broad HRP DAB for detection. [UM500091] requires HIER with with citrate pH6.0 at 110°C for 3min using pressure chamber/cooker. The placenta shows strong membrane and cytoplasmic in the endothelial cells.



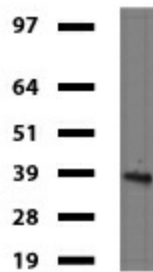
Immunohistochemical staining of paraffin-embedded human tonsil using anti-IDO1 clone UMAB126 mouse monoclonal antibody at 1:200 dilution of 1.0 mg/mL using Polink2 Broad HRP DAB for detection. [UM500091] requires HIER with with citrate pH6.0 at 110°C for 3min using pressure chamber/cooker. The tonsil shows strong membrane and cytoplasmic in the germinal center and rare strong nuclear, membrane, and cytoplasmic staining in the non-germinal centers.



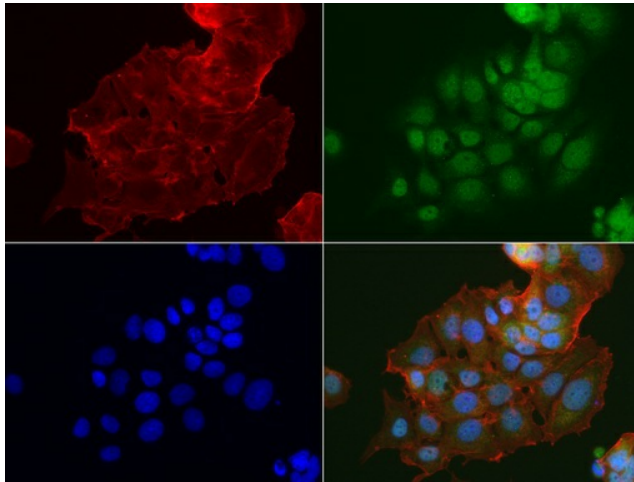
Immunohistochemical staining of paraffin-embedded human spleen using anti-IDO1 clone UMAB126 mouse monoclonal antibody at 1:200 dilution of 1.0 mg/mL using Polink2 Broad HRP DAB for detection. [UM500091] requires HIER with with citrate pH6.0 at 110°C for 3min using pressure chamber/cooker. The spleen shows very few cells staining in the red pulp with strong nuclear, membrane, and cytoplasmic staining.



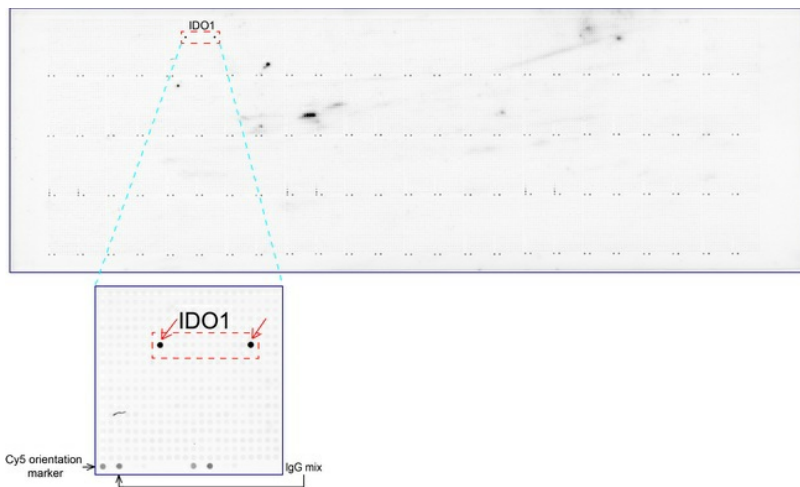
Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Thyroid, 7: Colon, 8: Spleen 9: Liver, 10: Ovary). Dilution: 1:500.



Western blot of mouse tissue lysates (20ug) from Brian. Primary antibody dilution: 1:500. Secondary antibody dilution: Mouse TrueBlot® Ultra (1:1000).



Immunofluorescent staining of MCF-7 cells using anti-IDO1 mouse monoclonal antibody ([UM500091], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-IDO1 mouse monoclonal antibody ([UM500091]). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.