

## Anti-TDO2 Antibody Picoband®

Catalog Number: A07526-2

### About TDO2

This gene encodes a heme enzyme that plays a critical role in tryptophan metabolism by catalyzing the first and rate-limiting step of the kynurenine pathway. Increased activity of the encoded protein and subsequent kynurenine production may also play a role in cancer through the suppression of antitumor immune responses, and single nucleotide polymorphisms in this gene may be associated with autism.

### Overview

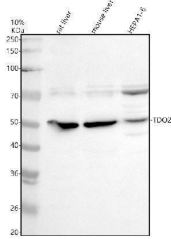
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|----------------------|---|
| Product Name         | Anti-TDO2 Antibody Picoband®  |
| Reactive Species     | Human, Mouse, Rat   |
| Description          | Boster Bio Anti-TDO2 Antibody Picoband® catalog # A07526-2. Tested in WB, IHC, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |
| Application          | ELISA, Flow Cytometry, IHC, WB  |
| Clonality            | Polyclonal  |
| Formulation          | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .   |
| Storage Instructions | At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.   |
| Host                 | Rabbit  |
| Uniprot ID           | P48775  |

### Technical Details

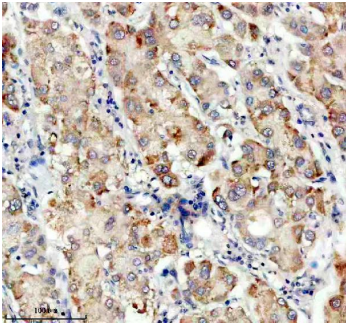
|                     |  |
|---------------------|--|
| Immunogen           | E.coli-derived human TDO2 recombinant protein (Position: K16-D406). Human TDO2 shares 89.3% amino acid (aa) sequence identity with both mouse and rat TDO2.  |
| Form                | Lyophilized  |
| Concentration       | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.  |
| Purification        | Immunogen affinity purified.   |
| Suggested Dilutions | Western blot, 0.25-0.5 ug/ml, Mouse, Rat<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human<br>Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human<br>ELISA, 0.1-0.5 ug/ml |



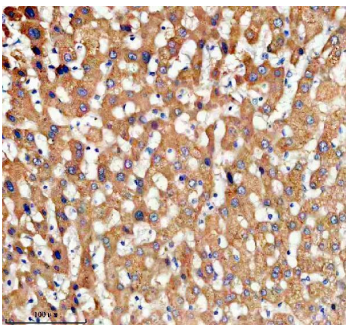
## Anti-TDO2 Antibody Picoband® (A07526-2) Images



Western blot analysis of TDO2 using anti-TDO2 antibody (A07526-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat liver tissue lysates Lane 2: mouse liver tissue lysates, Lane 3: mouse HEPA1-6 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TDO2 antigen affinity purified polyclonal antibody (A07526-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for TDO2 at approximately 48 kDa. The expected band size for TDO2 is at 48 kDa.

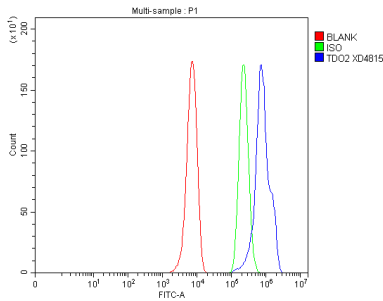


IHC analysis of TDO2 using anti-TDO2 antibody (A07526-2). TDO2 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TDO2 Antibody (A07526-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of TDO2 using anti-TDO2 antibody (A07526-2). TDO2 was detected in a paraffin-embedded section of human liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TDO2 Antibody (A07526-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Flow Cytometry analysis of HepG2 cells using anti-TDO2 antibody (A07526-2). Overlay histogram showing HepG2 cells stained with A07526-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum.



And then incubated with rabbit anti-TDO2 Antibody (A07526-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-TDO2 Antibody

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