

Anti-DAK/TKFC Antibody Picoband®

Catalog Number: A12154-2

About TKFC

This gene is a member of the family of dihydroxyacetone kinases, which have a protein structure distinct from other kinases. The product of this gene phosphorylates dihydroxyacetone, and also catalyzes the formation of riboflavin 4',5'-phosphate (aka cyclin FMN) from FAD. Several alternatively spliced transcript variants have been found for this gene.

Overview

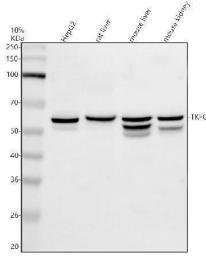
Product Name	Anti-DAK/TKFC Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-DAK/TKFC Antibody Picoband® catalog # A12154-2. Tested in WB, IHC, IF, Flow Cytometry, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium 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, IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
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	Q3LXA3

Technical Details

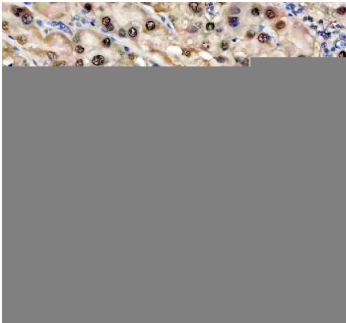
Immunogen	E.coli-derived human DAK/TKFC recombinant protein (Position: D15-E538). Human DAK/TKFC shares 85.3% and 86% amino acid (aa) sequence identity with mouse and rat DAK/TKFC, respectively.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

	ELISA, 0.1-0.5 ug/ml
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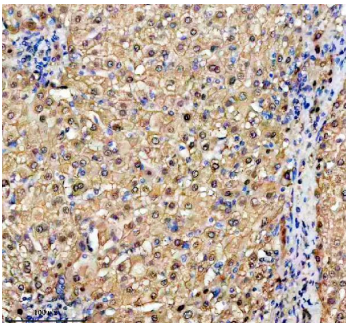
Anti-DAK/TKFC Antibody Picoband® (A12154-2) Images



Western blot analysis of DAK/TKFC using anti-DAK/TKFC antibody (A12154-2). 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: human HepG2 whole cell lysates, Lane 2: rat liver tissue lysates, Lane 3: mouse liver tissue lysates, Lane 4: mouse kidney tissue 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-DAK/TKFC antigen affinity purified polyclonal antibody (A12154-2) 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 DAK/TKFC at approximately 59 kDa. The expected band size for DAK/TKFC is at 59 kDa.

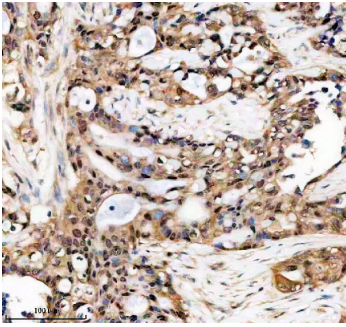


IHC analysis of DAK/TKFC using anti-DAK/TKFC antibody (A12154-2). DAK/TKFC was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DAK/TKFC Antibody (A12154-2) 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.

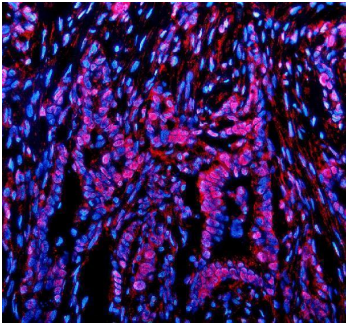


IHC analysis of DAK/TKFC using anti-DAK/TKFC antibody (A12154-2). DAK/TKFC was detected in a paraffin-embedded section of human liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DAK/TKFC Antibody (A12154-2) 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.

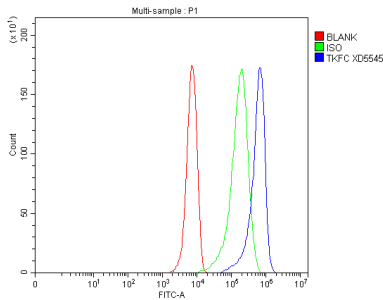
IHC analysis of DAK/TKFC using anti-DAK/TKFC antibody (A12154-2). DAK/TKFC was detected in a paraffin-embedded section of human pancreas cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked



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IF analysis of DAK/TKFC using anti-DAK/TKFC antibody (A12154-2). DAK/TKFC was detected in a paraffin-embedded section of human pancreas 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 5 ug/mL rabbit anti-DAK/TKFC Antibody (A12154-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HepG2 cells using anti-DAK/TKFC antibody (A12154-2). Overlay histogram showing HepG2 cells stained with A12154-2 (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-DAK/TKFC Antibody (A12154-2, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight@488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) 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-DAK/TKFC Antibody

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