

# Anti-Mouse 4-1BBL (TKS-1) In Vivo Antibody - Low Endotoxin

| Endotoxin   |
|---|
| Anti-Mouse 4-1BBL In Vivo Antibody - Low Endotoxin (TKS-1)  |
| Bio X Cell:   |
| ICH1184 is up to 37% cheaper for industry customers than the equivalent product BE0110 from Bio X Cell.   |
| Product Benefits:   |
| ichorbio's Anti-Mouse 4-1BBL In Vivo Antibody - Low Endotoxin (TKS-1) [ICH1184] is manufactured in a cGM compliant, ISO Quality Standard 9001:2015 facility. ichorbio's low endotoxin antibodies have half the endotoxin comparable antibodies from Bio X Cell at less than 1.0 EU/mg. If ichorbio's low endotoxin antibodies are not low enough we also offer ultra low endotoxin antibodies which have even less endotoxin (0.5EU/mg) at an even higher purity (98% versus 95%). ichorbio: the best antibodies for <i>in vivo</i> research. |
| Target:   |
| 4-1BBL  |
| Clone:  |
| TKS-1   |
| Size:   |
| ichorbio's TKS-1 <i>in vivo</i> antibody is available in the following bulk sizes: 5mg, 25mg, 50mg and 100mg. ichorbio regularly manufactures multi-gram amounts of our anti-4-1BBL TKS-1 clone - please contact us for pricing.  |
| Isotype:  |
| IgG2a kappa   |
| Other Names:  |
| CD137L, TNFSF9, 4-1BB Ligand, TKS-1   |
| Host:   |
| Rat   |
| Species Reactivity:   |
| Mouse   |
| Antigen Distribution:   |



4-1BBL is expressed by activated B cells, macrophages, and dendritic cells.

## **Background:**

4-1BBL (CD137L) and 4-1BB (CD137) are a receptor ligand pair belonging to the tumor necrosis factor (TNF) receptor/TNF superfamily. 4-1BBL is a type II transmembrane protein expressed by activated B cells, macrophages, and dendritic cells. Members of the TNF-TNF receptor superfamily play critical roles in regulating cellular activation, differentiation, and apoptosis and the 4-1BBL-4-1BB interaction is important in cellular immune responses. 4-1BBL-4-1BB interaction provides a co-stimulatory signal to T cells, resulting in increased proliferation and cytokine production. A TKS-1-producing hybridoma was generated by immunizing a SD rat with 4-1BBL-transfected NRK cells (rat IgG2a,?). Splenocytes were fused with P3U1 cells and hypoxanthine–aminopterin–thymidine selection was performed. The monoclonal antibody was identified by its strong reactivity with 4-1BBL-transfected L5178Y cells, cloned by limiting diffusion, purified from ascites, and found to bind to 4-1BBL/NRK and 4-1BBL/P815 cells. Pre-incubation with TKS-1 blocks 4-1BB—Ig binding to 4-1BBL and 4-1BB. Additionally, TKS-1 is specific to mouse 4-1BBL and can interrupt the interaction between 4-1BBL and 4-1BB. Additionally, TKS-1 can block anti-CD3-stimulated T cell proliferation co-stimulated by 4-1BBL /P815 cells. The monoclonal antibodies 19H3 and TKS-1 bind to different sites on murine 4-1BBL, with TKS-1 binding to a site that overlaps with the receptor binding site. Additionally, TKS-1 and 4-1BB bind to a similar site, making TKS-1 especially useful for blocking studies.

#### **Concentration:**

1.0 - 5.0 mg/ml

#### **Formulation:**

0.01 M phosphate buffered saline (PBS) pH 7.2, 150 mM NaCl with no carrier protein, potassium or preservatives added. BSA and Azide free.

#### **Purity:**

>95% by SDS-PAGE and HPLC

>98% by SDS-PAGE and HPLC

#### **Endotoxin:**

1.0 EU/mg as determined by the LAL method

? 0.75 EU/mg as determined by the LAL method

## **Aggregation:**

Aggregation level ? 5%

Aggregation level ? 1%

## **IMPACT Pathogen Test:**

# ichorbio

We use the IMPACT test generated by IDEXX Laboratories to guarantee our Ultra Low Endotoxin antibodies are pathogen free. Our mouse antibodies are tested for: Mycoplasma spp., Mycoplasma pulmonis, Sendai virus, Mouse hepatitis virus, Pneumonia virus of mice, Minute virus of mice, Mouse parvovirus (MPV1-5), Theiler's murine encephalomyelitis virus, Murine norovirus, Reovirus 3, Mouse rotavirus, Ectromelia virus, Lymphocytic choriomeningitis virus, Polyoma virus, Lactate dehydrogenase-elevating virus, Mouse adenovirus (MAD1, MAD2), Mouse cytomegalovirus, K virus, Mouse thymic virus, Hantaan virus, Corynebacterium bovis and Corynebacterium spp. (HAC2)

#### **Storage:**

Anti-4-1BBL In Vivo Antibody - Low Endotoxin (TKS-1) is stable for at least one week when stored sterile at 2-8°C. For long term storage aseptically aliquot in working volumes without diluting and store at -20°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.

# **Applications:**

Functional Assays, Blocking, Western Blot

# **Application Notes:**

Each investigator should determine their own optimal working dilution for specific applications...

Use:

Products are for research use only.

# **Isotype Control:**

Rat IgG2a In Vivo Isotype Control – Low Endotoxin (1-1) [ICH2244]