

CTLA-4 Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
CTLA-4 Concentrate	FP-A078-01	0.1 ml
CTLA-4 Concentrate	FP-A078-05	1 ml
CTLA-4 Predilute	FP-A078-70	7 ml

Description

Cytotoxic T-Lymphocyte-Associated Protein 4 (CTLA-4) is a receptor on T helper cells that functions as an immune checkpoint and downregulator of immune responses. Mutations in CTLA-4 are associated with insulin-dependent diabetes mellitus, Hashimoto's thyroiditis, Graves' disease, systemic lupus erythematosus (SLE), celiac disease, primary biliary cirrhosis, thyroid-associated orbitopathy, multiple sclerosis, and other autoimmune diseases. The spliced variant of CTLA-4 in SLE is present in the patient's serum. Haploinsufficiency of CTLA-4 causes the immune system disorder known as CTLA-4 deficiency or CHAI disease (CTLA-4 haploinsufficiency with autoimmune infiltration).

Specifications

Clone	IHC004
Source	Mouse Monoclonal
Applications	IHC (P)
Formulation	Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide

IHC Procedure*

Positive Control Tissue	Tonsil, Lymph Node, Colon, Thymus
Concetrated Dilution	1:50 – 1:200
Pretreatment	Perform heat-induced epitope retrieval (HIER) at pH 9 for 10 to 30 minutes
Incubation Time and Temp	10 to 30 minutes at room temperature
Detection	Refer to the detection system manual

*Result should confirmed by an established diagnostic procedure.

Result

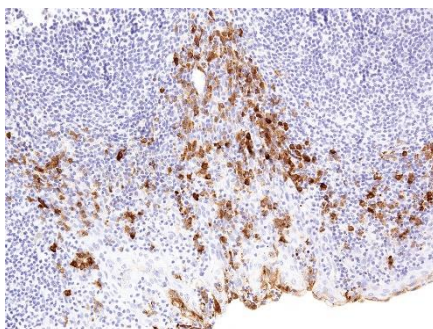


Figure. CTLA-4 on Tonsil

Storage and Handling

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

Precautions

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

References

1. **Denizot F**, et al. "A new member of the immunoglobulin superfamily--CTLA-4." *Nature*. 1987 Jul 16-22;328(6127):267-70.
2. **Dariavach P**, et al. "Human Ig superfamily CTLA-4 gene: chromosomal localization and identity of protein sequence between murine and human CTLA-4 cytoplasmic domains." *Eur J Immunol*. 1988 Dec;18(12):1901-5.
3. **Krummel MF**, et al. "CD28 and CTLA-4 have opposing effects on the response of T cells to stimulation." *J Exp Med*. 1995 Aug 1;182(2):459-65.
4. **Kuehn HS**, et al. "Immune dysregulation in human subjects with heterozygous germline mutations in CTLA4." *Science*. 2014 Sep 26;345(6204):1623-1627.
5. **Walunas TL**, et al. "CTLA-4 ligation blocks CD28-dependent T cell activation." *J Exp Med*. 1996 Jun 1;183(6):2541-50.

Technical Support

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for questions regarding this product.