

# CD6 Polyclonal Antibody

Catalog # AP73760

#### **Product Information**

Application	WB, IHC-P
Primary Accession	<u>P30203</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71801

#### **Additional Information**

Gene ID	923
Other Names	CD6; T-cell differentiation antigen CD6; T12; TP120; CD6
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## **Protein Information**

Name	CD6 ( <u>HGNC:1691</u> )
Function	Cell adhesion molecule that mediates cell-cell contacts and regulates T-cell responses via its interaction with ALCAM/CD166 (PubMed: <u>15048703</u> , PubMed: <u>15294938</u> , PubMed: <u>16352806</u> , PubMed: <u>16914752</u> , PubMed: <u>24584089</u> , PubMed: <u>24945728</u> ). Contributes to signaling cascades triggered by activation of the TCR/CD3 complex (PubMed: <u>24584089</u> ). Functions as a costimulatory molecule; promotes T-cell activation and proliferation (PubMed: <u>15294938</u> , PubMed: <u>16352806</u> , PubMed: <u>16914752</u> ). Contributes to the formation and maturation of the immunological synapse (PubMed: <u>15294938</u> , PubMed: <u>16352806</u> ). Functions as a calcium- dependent pattern receptor that binds and aggregates both Gram-positive and Gram-negative bacteria. Binds both lipopolysaccharide (LPS) from Gram-negative bacteria and lipoteichoic acid from Gram-positive bacteria (PubMed: <u>17601777</u> ). LPS binding leads to the activation of signaling cascades and down-stream MAP kinases (PubMed: <u>17601777</u> ). Mediates activation of the inflammatory response and the secretion of pro-inflammatory cytokines in response to LPS (PubMed: <u>17601777</u> ).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Detected at the

	immunological synapse, i.e, at the contact zone between antigen-presenting dendritic cells and T-cells (PubMed:15294938, PubMed:16352806). Colocalizes with the TCR/CD3 complex at the immunological synapse (PubMed:15294938)
Tissue Location	Detected on thymocytes (PubMed:15294938). Detected on peripheral blood T-cells (PubMed:15048703, PubMed:16352806) Detected on natural killer (NK) cells (PubMed:16352806). Soluble CD6 is detected in blood serum (at protein level) (PubMed:17601777). Detected in spleen, thymus, appendix, lymph node and peripheral blood leukocytes (PubMed:9013954). Expressed by thymocytes, mature T-cells, a subset of B-cells known as B-1 cells, and by some cells in the brain

## Background

Cell adhesion molecule that mediates cell-cell contacts and regulates T-cell responses via its interaction with ALCAM/CD166 (PubMed:<u>15048703</u>, PubMed:<u>15294938</u>, PubMed:<u>16352806</u>, PubMed:<u>16914752</u>, PubMed:<u>24945728</u>, PubMed:<u>24584089</u>). Contributes to signaling cascades triggered by activation of the TCR/CD3 complex (PubMed:<u>24584089</u>). Functions as costimulatory molecule; promotes T-cell activation and proliferation (PubMed:<u>15294938</u>, PubMed:<u>16352806</u>, PubMed:<u>16914752</u>). Contributes to the formation and maturation of the immunological synapse (PubMed:<u>15294938</u>, PubMed:<u>16352806</u>). Functions as calcium-dependent pattern receptor that binds and aggregates both Gram-positive and Gram-negative bacteria. Binds both lipopolysaccharide (LPS) from Gram-negative bacteria and lipoteichoic acid from Gram-positive bacteria (PubMed:<u>17601777</u>). LPS binding leads to the activation of signaling cascades and down-stream MAP kinases (PubMed:<u>17601777</u>). Mediates activation of the inflammatory response and the secretion of pro-inflammatory cytokines in response to LPS (PubMed:<u>17601777</u>).

#### Images



Western Blot analysis of 293 cells using CD6 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-tonsils, antibody was diluted at 1:100

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