

## Purified anti-mouse CD226 (DNAM-1) Antibody

<b>Catalog# / Size</b>	128822 / 500 µg
<b>Clone</b>	10E5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	DNAM-1, PTA1 (platelet and T cell activation antigen 1), TLISA1, LFA-1 associated Molecule PTA-1
<b>Isotype</b>	Rat IgG2b, κ
<b>Description</b>	CD226 (DNAM-1) is constitutively expressed on native CD8 <sup>+</sup> cells and on CD4 <sup>+</sup> T cells, macrophages and NK cells. This antibody (10E5) was reported to bind about 40% of inactivated CD4 <sup>+</sup> cells and binds only to differentiated Th1 cells, but not to Th2 or Th0 cells. It is also reported to suppress antigen-specific T cell expansion and EAE (experimental allergic encephalitis) mediated by Th1 cells.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Th1 polarized T cell clones
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">IHC-F - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. For immunohistochemistry on frozen tissue, a concentration range of 5.0 - 10.0 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application References</b>	1. Dardalhon V, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:1558 2. Huang Z, <i>et al.</i> 2011. <i>J Immunol.</i> 186:3421. <a href="#">PubMed</a>
<b>Product Citations</b>	1. Goh W, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108285. <a href="#">PubMed</a> 2. Wagner AK, <i>et al.</i> 2017. <i>Nat Commun.</i> 8:15627. <a href="#">PubMed</a>
<b>RRID</b>	AB_2728146 (BioLegend Cat. No. 128822)

### Antigen Details

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<b>Structure</b>	65 kd glycoprotein of a member of Ig-superfamily containing 2 immunoglobulin-like domains.
<b>Distribution</b>	Expressed on majority of CD4 <sup>+</sup> and CD8 <sup>+</sup> T cells, NK cells, monocytes/macrophages and a subset of B cells and thymocytes. Reported to be specifically expressed on the surface of Th1 cells, but downregulated in Th2 cells.

<b>Function</b>	Mediates cellular adhesion, involved in LFA-1 costimulatory signal for T cell differentiation and proliferation
<b>Ligand/Receptor</b>	CD112 and CD155
<b>Cell Type</b>	B cells, Macrophages, Monocytes, NK cells, T cells, Th1
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Tahara Hanaoka S, <i>et al.</i> 2006. <i>Blood</i> 107:1491 2. Shibuya K, <i>et al.</i> 2003. <i>J. Exp. Med.</i> 198:1829
<b>Gene ID</b>	<a href="#">225825</a>

## Related Protocols

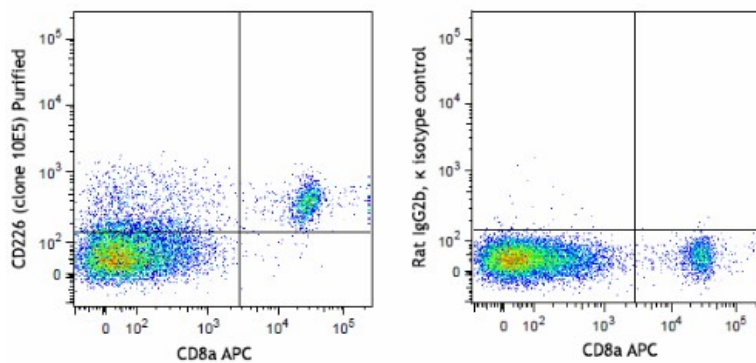
[Immunohistochemistry Protocol for Frozen Sections](#)

[Cell Surface Flow Cytometry Staining Protocol](#)

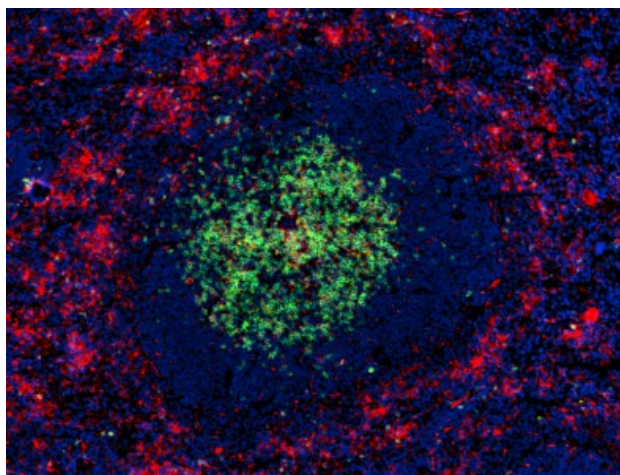
## Other Formats

FITC anti-mouse CD226 (DNAM-1), PE anti-mouse CD226 (DNAM-1), Alexa Fluor® 647 anti-mouse CD226 (DNAM-1), APC anti-mouse CD226 (DNAM-1), PE/Cyanine7 anti-mouse CD226 (DNAM-1), PerCP/Cyanine5.5 anti-mouse CD226 (DNAM-1), APC/Fire™ 750 anti-mouse CD226 (DNAM-1), PE/Dazzle™ 594 anti-mouse CD226 (DNAM-1), Biotin anti-mouse CD226 (DNAM-1), Purified anti-mouse CD226 (DNAM-1), TotalSeq™-A0852 anti-mouse CD226 (DNAM-1), TotalSeq™-C0852 anti-mouse CD226 (DNAM-1) Antibody

## Product Data



C57BL/6 mouse splenocytes were stained with CD8a APC and purified CD226 (clone 10E5, left) or purified rat IgG2b, κ isotype control (right), followed by anti-rat IgG2b FITC.



C57BL/6 mouse frozen spleen section was fixed with 4% paraformaldehyde (PFA) for 10 minutes and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 10 µg/ml CD226 (clone 10E5) purified and CD3ε (clone 500A2) Alexa Fluor® 594 (green) overnight at 4°C, followed by 2.5 µg/ml of goat anti rat IgG (clone Poly4054) Alexa Fluor® 647 (red) for 2 hours at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured by 10X objective.

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