

# Anti-CD2 [X53 (X/3)]

**Catalogue number:** 151341

**Sub-type:** Primary antibody

**Images:**

## Contributor

**Inventor:** Karen Pulford

**Institute:** University of Oxford

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-CD2 [X53 (X/3)]

**Alternate name:** CD2 Molecule; CD2 Antigen (P5); Sheep Red Blood Cell Receptor; T-Cell Surface Antigen T11/Leu-5; Erythrocyte Receptor; Rosette Receptor; LFA-3 Receptor

**Class:** Monoclonal

**Conjugate:** Unconjugated

**Description:** T-cell surface antigen CD2 is an antigen of the human T lymphocyte lineage that is expressed on all peripheral blood T cells. It is one of the earliest T cell markers, being present on more than 95% of thymocytes; it is also found on some natural killer cells but not on B lymphocytes. CD2 interacts with lymphocyte function associated antigen (LFA3/ CD58) and CD48/BCM1 to mediate adhesion between T cells and other cell types. Intracellularly, it interacts with lck. CD2 can be used for monitoring T-cell number in peripheral blood, and identification of lymphomas and leukaemias of T-cell origin.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG1 kappa

**Reactivity:** Human

**Selectivity:**

**Host:** Mouse

**Immunogen:** T cell lymphoma cells

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:**  
**Formulation:**  
**Recommended controls:**  
**Bacterial resistance:**  
**Selectable markers:**  
**Additional notes:**

## Target details

**Target:** CD2

**Target alternate names:**

**Target background:** T-cell surface antigen CD2 is an antigen of the human T lymphocyte lineage that is expressed on all peripheral blood T cells. It is one of the earliest T cell markers, being present on more than 95% of thymocytes; it is also found on some natural killer cells but not on B lymphocytes. CD2 interacts with lymphocyte function associated antigen (LFA3/ CD58) and CD48/BCM1 to mediate adhesion between T cells and other cell types. Intracellularly, it interacts with lck. CD2 can be used for monitoring T-cell number in peripheral blood, and identification of lymphomas and leukaemias of T-cell origin.

**Molecular weight:**

**Ic50:**

## Applications

**Application:** FACS ; IHC

**Application notes:**

## Handling

**Format:** Liquid

**Concentration:** 0.9-1.1 mg/ml

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:** PBS with 0.02% azide

**Storage conditions:** -15° C to -25° C

**Shipping conditions:** Shipping at 4° C

## Related tools

Related tools:

## References

**References:** Desamero et al. 2019. Sci Rep. 9(1):19635. PMID: 31873082. ; Helbling-Leclerc et al. 2019. Sci Rep. 9(1):17024. PMID: 31745226. ; Paul et al. 2019. J Immunother Cancer. 7(1):208. PMID: 31387637. ; Dick et al. 2019. Nat Immunol. 20(5):664. PMID: 30862954. ; Xu et al. 2019. Sci Adv. 5(4):eaav4570. PMID: 31032410. ; Jimenez et al. 2019. Front Immunol. 10:2183. PMID: 31620123. ; Zilio et al. 2017. J Immunol. :. PMID: 28396317. ; 4PD Fmized Dendrimers: A Flexible Tool for In Vivo Gene Silencing of Tumor-Educated Myeloid Cells. ; Maternal obesity leads to increased proliferation and numbers of astrocytes in the developing fetal and neonatal mouse hypothalamus. ; Kim et al. 2016. Int J Dev Neurosci. :. PMID: 27326907. ; Yao et al. 2016. Sci Rep. 6:26050. PMID: 27198662. ; Fm assessment of glioma pathogenesis by in vivo multi-parametric magnetic resonance imaging and in vitro analyses. ; Zhao et al. 2015. Oncogene. :. PMID: 26657156. ; CBP/catenin antagonist safely eliminates drug-resistant leukemia-initiating cells. ; Intratracheal cell transfer demonstrates the profibrotic potential of resident fibroblasts in pulmonary fibrosis. ; Tsukui et al. 2015. Am J Pathol. :. PMID: 26456579. ; Cui et al. 2015. Cell. 161(4):750-61. PMID: 25957683. ; IL-7-Induced Glycerol Transport and TAG Synthesis Promotes Memory CD8+ T Cell Longevity. ; Sheikh et al. 2015. Oncogene. PMID: 25772242. ; MOZ (MYST3, KAT6A) inhibits senescence via the INK4A-ARF pathway. ; Lin et al. 2013. Invest Ophthalmol Vis Sci. 54(3):1920-30. PMID: 23439595. ; Involvement of SDF1a and STAT3 in granulocyte colony-stimulating factor rescues optic ischemia-induced retinal function loss by mobilizing hematopoietic stem cells. ; Innis et al. 2010. Am J Physiol Gastrointest Liver Physiol. 299(6):G1376-85. PMID: 20864654. ; Perinatal lipid nutrition alters early intestinal development and programs the response to experimental colitis in young adult rats. ; Zindy et al. 2006. Proc Natl Acad Sci U S A. 103(31):11579-83. PMID: 16864777. ; N-Myc and the cyclin-dependent kinase inhibitors p18Ink4c and p27Kip1 coordinately regulate cerebellar development. ; Magaud et al. 1989. J Histochem Cytochem. 37(10):1517-27. PMID: 2476478. ; Double immunocytochemical labeling of cell and tissue samples with monoclonal anti-bromodeoxyuridine.