# Datasheet

Mouse mAb to       **CD45**
Clone                    **136-4B5**
Isotype                 **IgG1-κ**

## Source

A BALB/c mouse was immunized with stimulated human leucocytes.
Fusion partner: NS-1.

## Specifications

CD45 glycoproteins have various molecular weights on various cell types: B-cell 240 kDa, thymocytes 180 kDa, T-cell multiple bands. Reduced in PAGE gels: 180 and 240 kDa. Relevant epitopes are termed CD45RA (exon 4), CD45RB (exon 5), CD45RC (exon 6) and CD45R or CD45R0 (exon 4-6 spliced out). 136-4B5 was clustered in Vienna at the IV International CD workshop. The epitope of 136-4B5 is neuraminidase sensitive and when 136-4C5 binds to CD45 on anti Ig induced B-cells, it enhances their proliferation, while other anti CD45 antibodies can have the opposite effect.
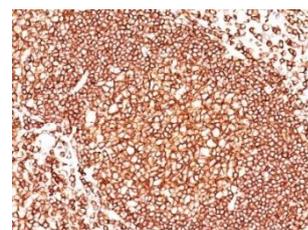
**Figure 1:** Human tonsil stained with 136-4B5 (paraffin).

## Species reactivity

Positive:            human.

## Applications

MAbs against CD45 can be used to differentiate lymphomas from carcinomas. In Hodgkin's disease CD45 is usually not expressed.

| Flow cytometry | Frozen sections | Immunofluorescence | Paraffin sections | Western blot |
|:---:|:---:|:---:|:---:|:---:|
| + | + | + | Citrate | + |

## Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02% sodium azide.
Stored at 4°C-8°C, shelf life is at least 24 months after purchase.

## Dilution advice

- Flow cytometry (0,5-1,0 μg/million cells in 0,1 ml).
- Immunoblotting (1-2 μg/ml).
- Immunofluorescence (0,5-1,0 μg/ml).
- Immunohistology (formalin-fixed: 1-2 μg/ml for 30 min at RT; staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes).

## Positive control

Toncil, Ramos, U-698, or GA-10 cells.

# Datasheet

## References

➤ Alsinet, E. et al., *Eur. J. Immunol.* **20(12)**: 2801-2804, (1990).
➤ Knapp, W. et al., Leucocyte typing IV, p 531-536. Oxford Univ. Press. (1989).

*Biologicals Ltd.*                    *For research only, not for diagnostic purposes.*