Technical Data Sheet

PE Hamster Anti-Mouse CD30

Material Number:	553825
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	mCD30.1 (also known as 2SH12-5F-2D)
Immunogen:	Mouse CD30-mouse IgG1 fusion protein
Isotype:	Armenian Hamster IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The mCD30.1 antibody reacts with CD30, a member of the Tumor Necrosis Factor Receptor (TNFR) family. The CD30 molecule is predominantly expressed by activated T lymphocytes, with its expression peaking at day 4-5 on spleen cells activated with plate-bound anti-CD3e antibody. The mCD30.1 antibody reacts with a majority of CD8+ T cells, as well as some CD4+ T cells in these cultures. Expression of CD30 on activated T lymphocytes is regulated by CD28 and cytokines. Its TNF-superfamily ligand, CD30L or CD153, is also expressed on activated T lymphocytes. By northern blot analysis, mouse Cd30 mRNA is detected in the thymus and in 72-hour pokeweed mitogen- and Con A-activated spleen cells, but not in the lung, brain, kidney, liver, bone marrow, unactivated spleen, or 72-hour LPS-activated splenocytes.1 It has also been reported that CD30 is expressed on naive B lymphocytes, it is not detectable after activation, and it starts to return after 72 hours following activation. Reports suggest that signaling through the CD30 molecule may be important in cytokine production by CD8+ CTL lines and may play a role in the regulation of Th1 and Th2 cytokine secretion by CD4+ and CD8+ T cells. It has also been proposed that CD30 plays an important role in the induction of diverse biological responses in lymphocytes, including differentiation, proliferation, and cellular death. In humans, CD30 was initially identified in Hodgkin and Reed-Sternberg cells in Hodgkin's disease patients and subsequently was found on neoplastic cells of certain types of non-Hodgkin's lymphomas.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application				
	Flow cytometry			

Recommended Assay Procedure:

This antibody conjugate is compatible with intracellular staining protocols using the BD Cytofix/Cytoperm™ Kit (Cat. No. 554714).

Suggested Companion Products

Catalog Number	Name	Size	Clone	
554714	BD Cytofix/Cytoperm Fixation/Permeablization Kit	250 tests	(none)	
553972	PE Hamster IgG1 κ Isotype Control	0.1 mg	A19-3	

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.



- 4. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.
- 5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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