

## Technical Data Sheet

## Purified Rat Anti-Human CD104

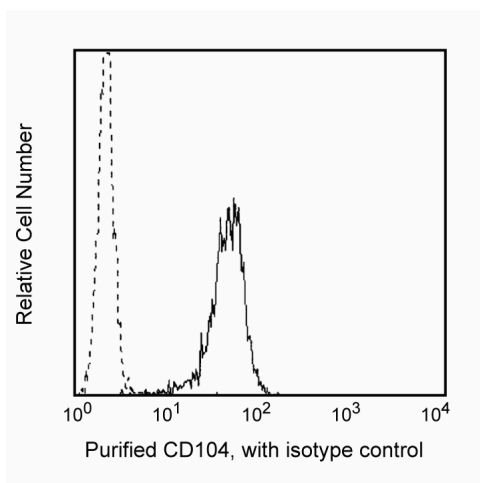
## Product Information

<b>Material Number:</b>	555719
<b>Alternate Name:</b>	Integrin $\beta 4$ chain
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	439-9B
<b>Isotype:</b>	Rat IgG2b, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	V BP480, S247
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

Reacts with CD104, integrin  $\beta 4$  chain, a 205 kDa transmembrane glycoprotein, which associates with CD49f (integrin  $\alpha 6$  chain) to form the  $\alpha 6/\beta 4$  (CD49f/CD104) complex. It is expressed on epithelial cells, Schwann cells, and some tumor cells. The CD49f/CD104 complex is located in the hemidesmosomes of the epidermis, suggesting its role in epidermal cell-basement membrane adhesion. The clone 439-9B was clustered as CD104 at the fifth Human Leucocyte Differentiation Antigen International Workshop. It may be used for immunoprecipitation, immunoblotting and immunohistochemistry on frozen tissue sections.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of A431, an epidermal carcinoma cell line, analyzed on a FACScan (BDIS, San Jose, CA)

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4° C.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555846	Purified Rat IgG2b, $\kappa$ Isotype Control	0.1 mg	R35-38
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

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## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
3. 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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Jones JC, Kurpakus MA, Cooper HM, Quaranta V. A function for the integrin alpha 6 beta 4 in the hemidesmosome. *Cell Regul*. 1991; 2(6):427-438.(Biology)

Mariani Costantini R, Falcioni R, Battista P, et al. Integrin (alpha 6/beta 4) expression in human lung cancer as monitored by specific monoclonal antibodies. *Cancer Res*. 1990; 50(18):6107-6112.(Biology)

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