

Technical Data Sheet

Purified Rat Anti-Mouse CD104

Product Information

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|-------------------------|---|
| Material Number: | 553745 |
| Alternate Name: | Integrin β 4 chain |
| Size: | 0.5 mg |
| Concentration: | 0.5 mg/ml |
| Clone: | 346-11A |
| Immunogen: | Tumor-associated antigen TSP-180 from a BALB/c mouse lung carcinoma |
| Isotype: | Rat (F344) IgG2a, κ |
| Reactivity: | QC Testing: Mouse |
| Storage Buffer: | Aqueous buffered solution containing $\leq 0.09\%$ sodium azide. |

Description

The 346-11A antibody reacts with an epitope at the beginning of the cysteine-rich repeat region of the 200-kDa integrin β 4 chain (CD104), which is found on the cell surface as a heterodimeric complex with the integrin α 6 chain (CD49f). The α 6 β 4 complex binds to laminins and is expressed on the basal surface of a variety of epithelial cell types, particularly on stratified squamous epithelia, and is also found in peripheral nerves, in certain subsets of endothelial cells, and on immature thymocytes. It has also been identified on a number of tumor tissues and participates in tumor progression events. Because of the localization of both human and mouse epidermal α 6 β 4 integrin to hemidesmosomes, a role in epidermal adhesion to basement membrane has been suggested.

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

| | |
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| Flow cytometry | Routinely Tested |
| Immunoprecipitation | Reported |
| Western blot | Reported |
| Immunohistochemistry-frozen | Reported |
| Immunohistochemistry-formalin (antigen retrieval required) | Not Recommended |

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--|--------|------------|
| 553927 | Purified Rat IgG2a, κ Isotype Control | 0.5 mg | R35-95 |
| 554016 | FITC Goat Anti-Rat Ig | 0.5 mg | Polyclonal |

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.
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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

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