

# ANK-1 (8G6): sc-81550

## BACKGROUND

Neural cell adhesion molecules (NCAMs) are a family of closely related cell surface glycoproteins involved in cell to cell interactions during growth and thought to play an important role in embryogenesis and development. The expression of these molecules is widespread in all three germ layers during embryogenesis, but is more restrictive in adult tissues. Multiple isoforms of NCAM have been reported in both mouse and human brain tissue. One such isoform is believed to be selectively expressed on adherent natural killer (ANK) cells. ANK-1 is an epitope expressed by the NCAM isoform found on these ANK cells. ANK cells represent a subpopulation of interleukin (IL)-2-stimulated NK cells which show increased integrin expression and potent anti-tumor activities. ANK cells have an ability to adhere to solid surfaces and migrate into and destroy cancer. Injection of ANK cells may be a potential treatment for metastasizing tumors.

## REFERENCES

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3. Kjaergaard, J., et al. 1998. Infiltration patterns of short- and long-term cultured A-NK and T-LAK cells following adoptive immunotherapy. *Scand. J. Immunol.* 47: 532-540.
4. Gu, S., et al. 2000. Observed localization of the long-term cultured rat adherent natural killer cells in mammary tumor tissues. *Cancer Immunol. Immunother.* 48: 703-713.
5. Fang, J., et al. 2002. Preparation and characteristics of human adherent natural killer cells induced by rHL-15. *Zhonghua Zhong Liu Za Zhi* 23: 444-447.
6. Sun, R., et al. 2003. Use of interleukin-15 for preparation of adherent NK cells from human peripheral blood: comparison with interleukin-2. *J. Immunol. Methods* 279: 79-90.
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## SOURCE

ANK-1 (8G6) is a rat monoclonal antibody raised against affinity-purified brain ANK-1 of mouse origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

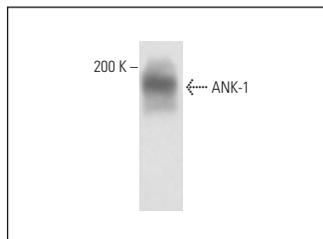
ANK-1 (8G6) is available conjugated to either phycoerythrin (sc-81550 PE) or fluorescein (sc-81550 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

## APPLICATIONS

ANK-1 (8G6) is recommended for detection of ANK-1 carbohydrate epitope present on most NCAM isoforms expressed on a subset of NK cells of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells); may cross-react with ANK-1 present on L1 cell adhesion molecules.

Positive Controls: mouse brain extract: sc-2253.

## DATA



ANK-1 (8G6): sc-81550. Western blot analysis of ANK-1 expression in mouse brain tissue extract.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.