BACKGROUND
Cytoskeletal intermediate filaments (IFs) constitute a diverse group of proteins that are expressed in a highly tissue-specific manner. Intermediate filaments are constructed from two-chain, α-helical, coiled-coil molecules arranged on an imperfect helical lattice and have been widely used as markers for distinguishing individual cell types within a tissue and identifying the origins of metastatic tumors. One such intermediate filament protein, Vimentin, is a general marker of cells originating in the mesenchyme. Vimentin is frequently coexpressed with other members of the intermediate filament family, such as the cytokeratins, in neoplasms including melanoma and breast carcinoma.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: VIM (human) mapping to 10p13; Vim (mouse) mapping to 2 A1.

SOURCE
Vimentin (3CB2) is a mouse monoclonal antibody raised against Vimentin extracted from embryonic brain tissue of chicken origin.

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

APPLICATIONS
Vimentin (3CB2) is recommended for detection of Vimentin of chicken, human, mouse and rat 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Positive Controls: A-10 cell lysate: sc-3806, U-251-MG whole cell lysate: sc-364176 or HUV-EC C whole cell lysate: sc-364180.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

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

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

SELECT PRODUCT CITATIONS

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.

DATA
Vimentin (3CB2): sc-80975. Western blot analysis of Vimentin expression in U-251-MG (A) and HUV-EC C (B) whole cell lysates.

Vimentin (3CB2): sc-80975. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic and membrane staining of ovarian stroma cells (A). Immunofluorescence staining of paraformaldehyde fixed cultured human U-87 glioma cells showing cytoskeletal localization. Kindly provided by Dr. Enrique J. de la Rosa, Consejo Superior de Investigaciones Científicas (B).

Molecular Weight of Vimentin: 57 kDa.

CONJUGATES
See Vimentin (E-5): sc-373717 for Vimentin antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.