

DRAK2 (m): 293T Lysate: sc-119844

BACKGROUND

DAP (death associated protein) kinase and ZIP kinase are members of a novel protein kinase family, the members of which have the capacity to mediate apoptosis through their catalytic activities. DAP kinase contains a "death domain" and has been shown to mediate γ interferon-induced apoptosis. The introduction of DAP kinase into highly metastatic carcinoma clones lacking DAP kinase expression was shown to result in the suppression of metastasis, thus linking suppression of apoptosis to metastasis. ZIP kinase contains a leucine zipper domain, which is necessary for homodimerization and for interaction with other leucine zipper proteins. ZIP kinase dimerizes with ATF-4, an ATF/CREB transcription factor family member that contains a leucine zipper. DRK1 (DAP kinase-related apoptosis-inducing protein kinase 1) and DRK2 are DAP kinase related proteins. DRK1 and DRK2 are localized to the nucleus, and overexpression of both DRK proteins in NIH/3T3 cells induces morphological changes associated with apoptosis.

REFERENCES

1. Hai, T.W., et al. 1989. Transcription factor ATF cDNA clones: an extensive family of leucine zipper proteins able to selectively form DNA-binding heterodimers. *Genes Dev.* 3: 2083-2090.
2. Deiss, L.P., et al. 1995. Identification of a novel serine/threonine kinase and a novel 15 kD protein as potential mediators of the γ interferon-induced cell death. *Genes Dev.* 9: 15-30.
3. Sakagami, H., et al. 1997. Molecular cloning and developmental expression of a rat homologue of death-associated protein kinase in the nervous system. *Brain Res. Mol. Brain Res.* 52: 249-256.
4. Inbal, B., et al. 1997. DAP kinase links the control of apoptosis to metastasis. *Nature* 390: 180-184.
5. Kawai, T., et al. 1998. ZIP kinase, a novel serine/threonine kinase which mediates apoptosis. *Mol. Cell. Biol.* 18: 1642-1651.
6. Sanjo, H., et al. 1998. DRKs, novel serine/threonine kinases related to death-associated protein kinase that trigger apoptosis. *J. Biol. Chem.* 273: 29066-29071.

CHROMOSOMAL LOCATION

Genetic locus: Stk17b (mouse) mapping to 1 C1.1.

PRODUCT

DRAK2 (m): 293T Lysate represents a lysate of mouse DRAK2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

DRAK2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive DRAK2 antibodies. Recommended use: 10-20 μ l per lane.

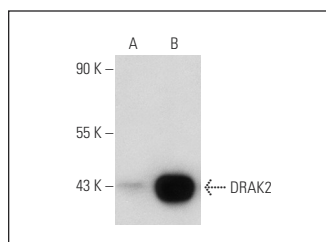
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DRAK2 (4Y-5): sc-100370 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse DRAK2 expression in DRAK2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



DRAK2 (4Y-5): sc-100370. Western blot analysis of DRAK2 expression in non-transfected: sc-117752 (A) and mouse DRAK2 transfected: sc-119844 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.