

AK7 (B-22): sc-130682

BACKGROUND

AK7 (adenylate kinase 7) is a 723 amino acid protein that belongs to the adenylate kinase family and functions to catalyze the conversion of one ATP and one AMP to 2 ADP molecules. The gene encoding AK7 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the Presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder α 1-antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AK7 (human) mapping to 14q32.2.

SOURCE

AK7 (B-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of AK7 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

AK7 (B-22) is recommended for detection of AK7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AK7 siRNA (h): sc-72470, AK7 shRNA Plasmid (h): sc-72470-SH and AK7 shRNA (h) Lentiviral Particles: sc-72470-V.

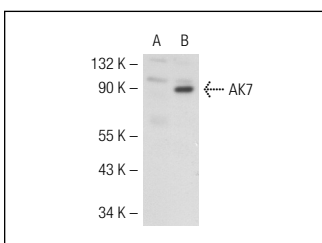
Molecular Weight of AK7: 83 kDa.

Positive Controls: T-47D cell lysate: sc-2293 or AK7 (h2): 293T Lysate: sc-173971.

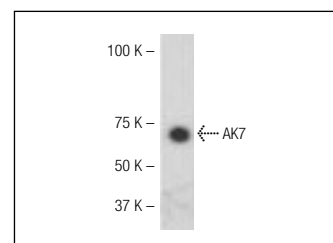
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



AK7 (B-22): sc-130682. Western blot analysis of AK7 expression in non-transfected: sc-117752 (A) and human AK7 transfected: sc-173971 (B) 293T whole cell lysates.



AK7 (B-22): sc-130682. Western blot analysis of AK7 expression in T-47D whole cell lysate.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **AK7 (D-5): sc-393337**, our highly recommended monoclonal alternative to AK7 (B-22).