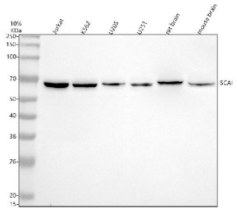
SCAI Antibody / Suppressor of cancer cell invasion (FY12076)

Catalog No.	Formulation	Size
FY12076	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q8N9R8
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This SCAI antibody is available for research use only.



Western blot analysis of SCAI using anti-SCAI antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human Jurkat whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human U20S whole cell lysates, Lane 4: human U251 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SCAI antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for SCAI at approximately 66 kDa. The expected band size for SCAI is at 70 kDa.

Description

SCAI antibody detects Suppressor of cancer cell invasion, encoded by the SCAI gene. Suppressor of cancer cell invasion is a transcriptional regulator that represses genes promoting migration and invasion, playing an important role in cancer progression and cellular motility. SCAI antibody provides researchers with a reagent for studying tumor invasion, actin

cytoskeleton regulation, and metastasis.

Suppressor of cancer cell invasion functions as a transcriptional repressor by interacting with myocardin-related transcription factors and actin regulatory pathways. Research using SCAI antibody has shown that it inhibits serum response factor target genes and downregulates expression of proteins that promote actin cytoskeleton remodeling. This leads to reduced migration and invasion in cancer cells, highlighting SCAI as an invasion suppressor.

Studies with SCAI antibody have revealed that loss of SCAI enhances cancer cell invasion and metastasis. In breast and prostate cancer models, reduced expression correlates with higher invasiveness and poor prognosis. Conversely, restoration of SCAI suppresses migration, suggesting therapeutic potential. These findings underscore its importance in tumor suppression.

Beyond cancer, Suppressor of cancer cell invasion may regulate other processes involving actin dynamics. Research using SCAI antibody has suggested roles in development and wound healing, where it modulates actin-dependent transcriptional programs. This positions SCAI as a broader regulator of motility-related pathways.

Dysregulation of SCAI has been linked to multiple tumor types and correlates with aggressive phenotypes. Research using SCAI antibody has demonstrated that its downregulation is a hallmark of invasive cancers, while its presence restrains progression. These insights emphasize its potential as both a biomarker and therapeutic target.

SCAI antibody is widely applied in immunohistochemistry, western blotting, and cell migration studies. Immunohistochemistry demonstrates reduced expression in invasive cancers, western blotting quantifies levels in tumor and normal tissue, and functional assays assess its effect on motility. These applications make SCAI antibody indispensable for cancer research.

By providing validated SCAI antibody reagents, NSJ Bioreagents supports studies into invasion suppression, transcriptional regulation, and cancer biology. Detection of Suppressor of cancer cell invasion provides researchers with insight into how transcriptional repressors control migration and tumor progression.

Application Notes

Optimal dilution of the SCAI antibody should be determined by the researcher.

Immunogen

E.coli-derived human SCAI recombinant protein (Position: M1-A549) was used as the immunogen for the SCAI antibody.

Storage

After reconstitution, the SCAI antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.