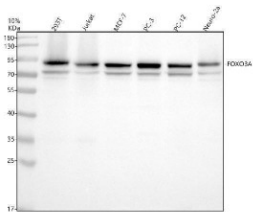
FKHRL1 Antibody / FOXO3A Antibody (FY13484)

Catalog No.	Formulation	Size
FY13484	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O43524
Applications	Western blot: 0.5-1ug/ml
Limitations	This FKHRL1 Antibody / FOXO3A Antibody is available for research use only.



FKHRL1 Antibody Human, Rat and Mouse Cell WB. Western blot analysis was performed using FOXO3A Antibody on lane 1: human 293T, lane 2: human Jurkat, lane 3: human MCF-7, lane 4: human PC-3, lane 5: rat PC-12, and lane 6: mouse Neuro-2a whole cell lysates. A prominent immunoreactive band is detected at approximately 90 kDa in all samples, together with a weaker band at approximately 71â€“75 kDa, consistent with the predicted molecular weight of FOXO3A. The higher molecular weight species likely reflects post-translationally modified forms of FOXO3A that migrate above the predicted size. Detection across human, rat, and mouse cell lines demonstrates the conserved expression of this forkhead transcription factor. This FKHRL1 Antibody / FOXO3A Antibody is well suited for Western blot studies of FOXO3A expression, PI3K/AKT signaling, transcriptional regulation, apoptosis, and cellular stress responses.

Description

FKHRL1 Antibody / FOXO3A Antibody recognizes FKHRL1, also known as Forkhead Box O3 (FOXO3A), a member of the Forkhead box O family of transcription factors that regulates genes controlling apoptosis, oxidative stress resistance, autophagy, DNA repair, metabolism, and cell cycle progression. Although FOXO3A is now the preferred gene and protein designation, the name FKHRL1 (Forkhead in Rhabdomyosarcoma Like 1) remains widely used throughout the scientific literature and appears in numerous legacy publications. A FKHRL1 Antibody is therefore valuable for researchers

investigating both historical and contemporary studies of FOXO3A biology, transcriptional regulation, and intracellular signaling.

FKHRL1 functions as a sequence-specific DNA-binding transcription factor whose activity is tightly regulated by the phosphoinositide 3-kinase (PI3K)/AKT signaling pathway. Growth factor stimulation leads to AKT-mediated phosphorylation of FKHRL1, promoting association with 14-3-3 proteins, export from the nucleus, and suppression of transcriptional activity. In contrast, oxidative stress, nutrient deprivation, and other cellular challenges favor nuclear localization and activation of genes involved in apoptosis, antioxidant defense, autophagy, and metabolic adaptation. Researchers frequently analyze FKHRL1 together with AKT, mTOR, PTEN, and phospho-FOXO3A to better understand signaling events that determine cell survival and stress responses. A FKHRL1 Antibody therefore provides an important tool for studies of transcription factor regulation and signal transduction.

Altered expression or regulation of FKHRL1 has been associated with numerous human diseases, including breast, prostate, lung, colorectal, ovarian, and hematologic cancers, where persistent PI3K/AKT activation suppresses FOXO3A tumor suppressor activity. Beyond oncology, FKHRL1 contributes to cardiovascular biology, glucose metabolism, neurodegenerative disease, immune regulation, skeletal muscle maintenance, stem cell biology, and healthy aging. Genetic studies have identified FOXO3A variants that correlate with increased human lifespan, further emphasizing the biological importance of this transcription factor. Consequently, a FKHRL1 Antibody has become an essential research reagent for investigations spanning cancer biology, metabolism, neuroscience, immunology, and aging research.

FKHRL1 is routinely analyzed using Western blot, immunohistochemistry, immunofluorescence, immunoprecipitation, chromatin immunoprecipitation, and flow cytometry to evaluate protein expression, intracellular localization, and transcriptional activity. When used alongside phospho-specific FOXO3A antibodies, investigators can distinguish changes in total protein abundance from phosphorylation-dependent regulation. NSJ Bioreagents provides carefully validated antibodies to support these applications across diverse experimental systems. A FKHRL1 Antibody / FOXO3A Antibody provides researchers with a dependable reagent for investigating transcriptional regulation, apoptosis, oxidative stress responses, PI3K/AKT signaling, and mechanisms governing cellular homeostasis.

Visit our FOXO3A Antibody / Forkhead Transcription Factor Antibody page for additional information about validated antibodies for investigating FOXO3A expression, forkhead transcription factor biology, PI3K/AKT signaling, apoptosis, and oxidative stress responses.

Application Notes

Optimal dilution of the FKHRL1 Antibody / FOXO3A Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human Forkhead in Rhabdomyosarcoma Like 1 (amino acids R323-W670) was used as the immunogen for the FKHRL1 Antibody.

Storage

After reconstitution, the FKHRL1 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

FKHRL1 antibody, FOXO3A antibody, Forkhead Box O3 antibody, Forkhead Transcription Factor antibody

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