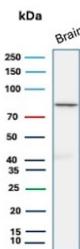


FOXO1 Antibody / Forkhead box protein O1 [clone FOXO1/9792] (V5702)

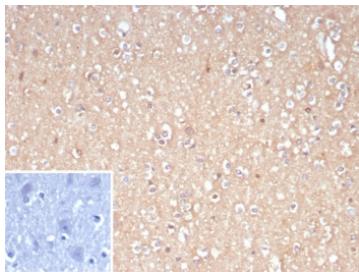
Catalog No.	Formulation	Size
V5702-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5702-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5702SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

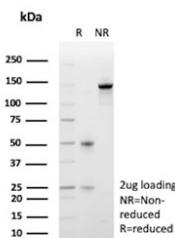
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	FOXO1/9792
Purity	Protein G affinity
UniProt	Q12778
Localization	Cytoplasm, Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This FOXO1 antibody is available for research use only.



Western blot testing of human brain tissue lysate with FOXO1 antibody (clone FOXO1/9792). Predicted molecular weight ~70 kDa.



IHC staining of FFPE human brain tissue with FOXO1 antibody (clone FOXO1/9792). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free FOXO1 antibody (clone FOXO1/9792) as confirmation of integrity and purity.

Description

FKHR (for forkhead in rhabdomyosarcoma) and FKHRL1 are members of the forkhead family of transcription factors. Transcriptional activation of FKHR proteins is regulated by the serine/threonine kinase Akt1, which phosphorylates FKHRL1 and results in FKHRL1 associating with 14-3-3 proteins and being retained in the cytoplasm. Induction of apoptosis or withdrawal of growth factors stimulates dephosphorylation and nuclear translocation of FKHR proteins, leading to FKHR-induced gene-specific transcriptional activation. FKHR, also designated forkhead box protein O1A (FOXO1), is a ubiquitously expressed protein that shuttles between the cytoplasm and nucleus. Genetic mutations in FKHR genes, including the t(2;13) and t(1;3) translocations, are commonly found in alveolar rhabdomyosarcomas. These translocations result in the fusion of the amino terminus of Pax-3 or Pax-7, including the paired box and homeodomain DNA-binding domains, with the carboxyterminus of FKHR, which contains a transcriptional activation domain. The Pax-3/FKHR fusion protein appears to function as an oncogenic transcription factor that enhances the activation of normal Pax-3 target genes.

Application Notes

Optimal dilution of the FOXO1 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 450-650 from human FOXO1 protein was used as the immunogen for the FOXO1 antibody.

Storage

Aliquot the FOXO1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.