abcam

Product datasheet

Anti-FOXO1A antibody ab39670

★★★★★ 12 Abreviews 89 References 画像数 4

製品の概要

製品名 Anti-FOXO1A antibody

製品の詳細 Rabbit polyclonal to FOXO1A

由来種 Rabbit

アプリケーション 適用あり: ELISA, WB, IHC-P

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Human FOXO1A. Synthetic non-phosphopeptide derived

from human FOXO1A around the phosphorylation site of serine 319.

Database link: Q12778

特記事項 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS

Without Mg2+ and Ca2+

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ IgG

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab39670の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA		Use at an assay dependent concentration.
WB	★★★★☆ (6)	1/500 - 1/1000. Detects a band of approximately 70 kDa (predicted molecular weight: 70 kDa).
IHC-P	★★★★ (3)	Use at an assay dependent concentration.

ターゲット情報

機能 Transcription factor which acts as a regulator of cell responses to oxidative stress. In the presence

of KIRT1, mediates down-regulation of cyclin D1 and up-regulation of CDKN1B levels which are

required for cell transition from proliferative growth to quiescence.

組織特異性 Ubiquitous.

関連疾患 Defects in FOXO1 are a cause of rhabdomyosarcoma type 2 (RMS2) [MIM:268220]. It is a form

of rhabdomyosarcoma, a highly malignant tumor of striated muscle derived from primitive

mesenchimal cells and exhibiting differentiation along rhabdomyoblastic lines.

Rhabdomyosarcoma is one of the most frequently occurring soft tissue sarcomas and the most common in children. It occurs in four forms: alveolar, pleomorphic, embryonal and botryoidal

rhabdomyosarcomas. Note=Chromosomal aberrations involving FOXO1 are found in

rhabdomyosarcoma. Translocation (2;13)(q35;q14) with PAX3; translocation t(1;13)(p36;q14)

with PAX7. The resulting protein is a transcriptional activator.

配列類似性 Contains 1 fork-head DNA-binding domain.

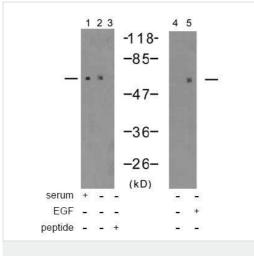
翻訳後修飾 Phosphorylated by AKT1; insulin-induced (By similarity). IGF1 rapidly induces phosphorylation of

Ser-256, Thr-24, and Ser-319. Phosphorylation of Ser-256 decreases DNA-binding activity and promotes the phosphorylation of Thr-24, and Ser-319, permitting phosphorylation of Ser-322 and Ser-325, probably by CK1, leading to nuclear exclusion and loss of function. Phosphorylation of Ser-329 is independent of IGF1 and leads to reduced function. Phosphorylated upon DNA

damage, probably by ATM or ATR.

細胞内局在 Cytoplasm. Nucleus. Shuttles between cytoplasm and nucleus.

画像



Western blot - Anti-FOXO1A antibody (ab39670)

Lanes 1-3: Anti-FOXO1A antibody (ab39670) at 1/500 dilution **Lanes 4-5**: Anti-FOXO1A (phospho S319) antibody (ab38516) at 1/500 dilution

Lane 1: 293 Cell extract

Lanes 2-5: HeLa Cell extract

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : Alkaline Phosphatase AffiniPure Goat Anti-Rabbit lgG (H+L)

Predicted band size: 70 kDa **Observed band size:** 70 kDa

10% gel.

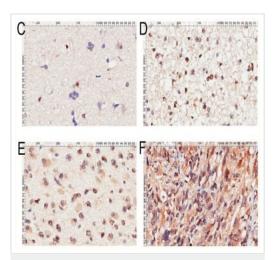
Running conditions: 60v, 30min; 120v 60min

Transfer conditions: 150mA 120min Nitrocellulose membrane.

Blocking conditions: 5% non-fat milk in TBST, RT, 90min.

Primary antibody incubation: 4?, overnight.

Washing condition: 5 ml TBST, 4 x 5min.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FOXO1A antibody (ab39670)

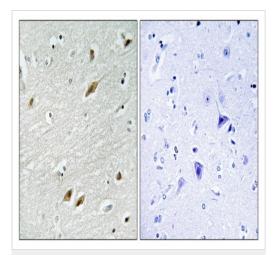
Chen, C. et al PLoS One. 2013 Jul 9;8(7):e69260. doi: 10.1371/journal.pone.0069260. Print 2013 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Tissue microarray analysis of FOXO1 expression

Representative images of FOXO1 expression in normal brain tissue (C, ×200); grade II diffuse astrocytoma (D, ×200); grade III anaplastic astrocytoma (E, ×200) and grade IV glioblastoma (F, ×200).

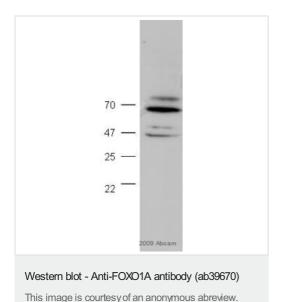
FOXO1 was detected using ab39670 at 1/200 dilution. The tissue microarray was contructed from paraffin-embedded human brain tissue samples.

(After Figure 1 of Chen et al).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FOXO1A antibody (ab39670)

Paraffin-embedded human brain tissue stained for FOXO1 with ab39670 at 1/50 dilution in immunohistochemical analysis. The right hand image was obtained following blocking with the immunizing peptide.



Anti-FOXO1A antibody (ab39670) at 1/1000 dilution + Whole cell lysates prepared from human Jurkat cells at 200000 cells

Secondary

HRP-conjugated donkey polyclonal to rabbit IgG at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 70 kDa **Observed band size:** 70 kDa

Additional bands at: 45 kDa (possible non-specific binding), 50 kDa (possible non-specific binding), 80 kDa (possible non-specific

binding)

Exposure time: 30 seconds

Primary diluted in PBS (BSA + 0.1% Tween20) and incubated with sample for 90 minutes at 20°C.

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