

Product datasheet

Human FOXO1A Matched Antibody Pair Kit ab218802

Recombinant

2 Images

Overview

Product name	Human FOXO1A Matched Antibody Pair Kit
Detection method	Colorimetric
Assay type	ELISA set
Sensitivity	7.3 pg/ml
Range	125 pg/ml - 8000 pg/ml
Species reactivity	Reacts with: Human
Product overview	<p>Human FOXO1A Matched Antibody Pair Kits include a capture and a biotinylated detector antibody pair, along with a calibrated protein standard, suitable for sandwich ELISA. The Matched Antibody Pair Kit can be used to quantify native and recombinant human FOXO1A.</p> <p>Optimization of the kit reagents to sample type, immunoassay format or instrumentation may be required. Guidelines for use of this kit in a standard 96-well microplate sandwich ELISA using HRP/TMB system of colorimetric detection is described in this assay procedure for the purposes of quantification.</p> <p>Protocol information and tips on the use of the Matched Antibody Pair kits for sandwich ELISA can be found on our website. An accessory pack can be purchased which includes buffer reagents required to perform 10 x 96-well plate sandwich ELISAs (ab210905).</p> <p>For additional information on the performance of the antibody pair used in this kit, please see our equivalent SimpleStep ELISA kit ab215087. Please note that while the antibody pair is the same provided in the corresponding SimpleStep ELISA Kit, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits.</p>
Tested applications	Suitable for: ELISA
Platform	Reagents

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	10 x 96 tests	5 x 96 tests
Human FOXO1A Capture Antibody	2 x 50µg	1 x 50µg
Human FOXO1A Detector Antibody	2 x 12.5µg	1 x 12.5µg
Human FOXO1A Lyophilized Protein	2 vials	1 vial

Function 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.

Tissue specificity Ubiquitous.

Involvement in disease 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 mesenchymal 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.

Sequence similarities Contains 1 fork-head DNA-binding domain.

Post-translational modifications 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.

Cellular localization Cytoplasm. Nucleus. Shuttles between cytoplasm and nucleus.

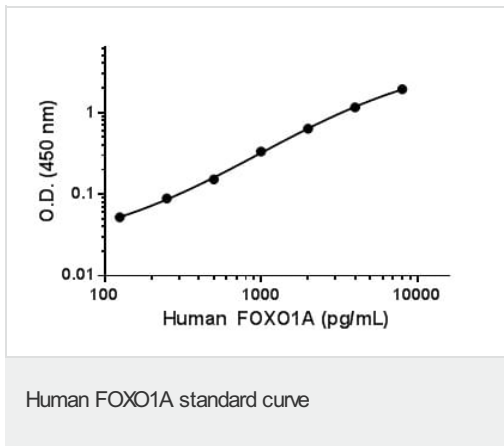
Applications

Our [Abpromise guarantee](#) covers the use of **ab218802** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.




Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.

Images



Standard calibration curve. Background subtracted values are graphed.

Powered by recombinant antibodies

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Sandwich ELISA - Human FOXO1A Matched Antibody Pair Kit (ab218802)

To learn more about the advantages of recombinant antibodies see [here](#).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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