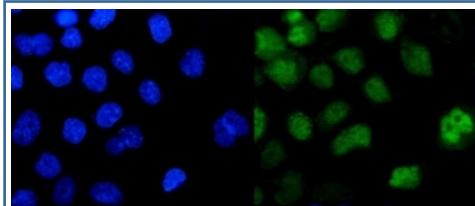


Pokemon Antibody / ZBTB7A (R31846)

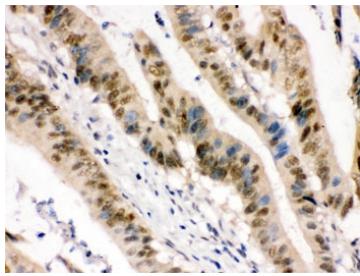
Catalog No.	Formulation	Size
R31846	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O95365
Localization	Nuclear
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This Pokemon antibody is available for research use only.



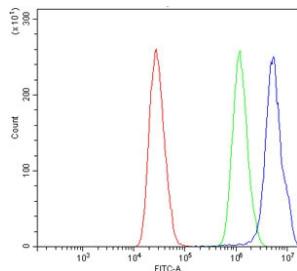
Immunofluorescent staining of FFPE human A431 cells with Pokemon antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC testing of FFPE human intestinal cancer tissue with Pokemon antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of human HeLa cell lysate with Pokemon antibody. Predicted molecular weight ~61 kDa but routinely observed at ~75 kDa.



Flow cytometry testing of human MCF7 cells with Pokemon antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Pokemon antibody.

Description

Zinc finger and BTB domain-containing protein 7A, also called Pokemon and FBI-1, is a protein that in humans is encoded by the ZBTB7A gene. It has a critical oncosuppressive role in the prostate. Prostate-specific inactivation of ZBTB7A leads to a marked acceleration of PTEN loss-driven prostate tumorigenesis through bypass of PTEN loss-induced cellular senescence. It has been showed that ZBTB7A physically interacts with SOX9 and functionally antagonizes its transcriptional activity on key target genes such as MIA, which is involved in tumor cell invasion, and H19, a long noncoding RNA precursor for an RB-targeting microRNA. Inactivation of ZBTB7A in vivo leads to RB downregulation, bypass of PTEN loss-induced cellular senescence, and invasive prostate cancer. Notably, it has been also found that ZBTB7A is genetically lost, as well as downregulated at both the mRNA and protein levels, in a subset of human advanced prostate cancers. Therefore, ZBTB7A is identified as a context-dependent cancer gene that can act as an oncogene in some contexts but that also has oncosuppressive-like activity in PTEN-null tumors.

Application Notes

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

Immunogen

Amino acids DLLDRQILAADAGADAGQLDLVDQIDQRNLLRAKEYLEF of human ZBTB7A were used as the immunogen for the Pokemon antibody.

Storage

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

References (1)