10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# ZZZ3 Rabbit pAb

Catalog # AP98011

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | Q8IYH5 |
| **Other Accession** | Q8IYH5 |
| **Reactivity** | Rat, Human |
| **Predicted** | Pig, Mouse, Chicken, Dog, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 102023 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human ZZZ3 |
| **Epitope Specificity** | 4-100/903 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Contains 1 HTH myb-type DNA-binding domain. Contains 1 ZZ-type zinc finger. |
| **SUBUNIT** | Component of the ADA2A-containing complex (ATAC), composed of CSRP2BP, KAT2A, TADA2L, TADA3L, ZZ3, MBIP, WDR5, YEATS2, CCDC101 and DR1. |
| **Post-translational modifications** | Phosphorylated upon DNA damage, probably by ATM or ATR. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | ZZZ3 (ZZ-type zinc finger-containing protein 3) is a 903 amino acid protein that contains one HTH myb-type DNA-binding domain and one ZZ-type zinc finger. Phosphorylated upon DNA damage by ATM or ATR, ZZZ3 is a subunit of the ATAC complex, which is composed of GCN5, CRP2BP, ADA3, TADA2L, DR1, CCDC101, YEATS2, WDR5 and MBIP. The ATAC complex has histone acetyltransferase activity on histones H3 and H4. ZZZ3 is expressed as four isoforms produced by alternative splicing and is encoded by a gene mapping to human chromosome 1. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 26009 |
| **Other Names** | ATAC1; ZZZ3_HUMAN; ZZZ3; zinc finger ZZ-type containing 3; ATAC component 1 homolog (Drosophila) |
| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

| | |
|---|---|
| **Name** | ZZZ3 |
| **Function** | Histone H3 reader that is required for the ATAC complex- mediated maintenance of histone acetylation and gene activation (PubMed:30217978). Component of the ATAC complex, a complex with histone acetyltransferase activity on histones H3 and H4 (PubMed:19103755). |
| **Cellular Location** | Nucleus {ECO:0000255\|PROSITE-ProRule:PRU00625}. |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.