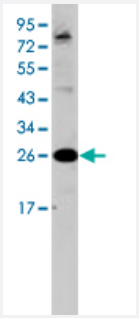
# FREQ polyclonal antibody

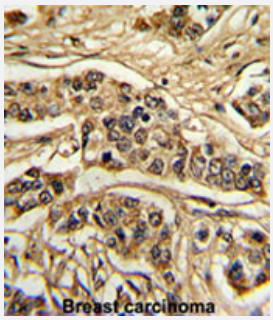
Catalog # PAB3601 Size 400 uL

## Applications



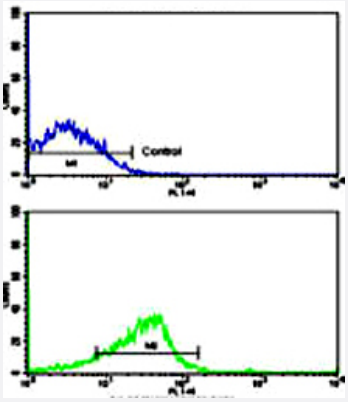

### Western Blot (Cell lysate)

Western blot analysis of MCF-7 cell lysate (35 ug/lane) with FREQ polyclonal antibody (Cat # PAB3601).




### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human breast carcinomareacted with FREQ polyclonal antibody (Cat # PAB3601), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.
This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.




### Flow Cytometry

Flow cytometric analysis of ZR-75-1 cells using FREQ polyclonal antibody (Cat # PAB3601)(bottom histogram) compared to a negative control cell (top histogram).
FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## Specification

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|---|---|
| **Product Description** | Rabbit polyclonal antibody raised against synthetic peptide of FREQ. |

| | |
|---|---|
| **Immunogen** | A synthetic peptide (conjugated with KLH) corresponding to internal region of human FREQ. |
| **Host** | Rabbit |
| **Reactivity** | Human |
| **Form** | Liquid |
| **Purification** | Protein G purification |
| **Recommend Usage** | Flow Cytometry (1:10-50)<br>Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-100)<br>Western Blot (1:1000)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (0.09% sodium azide) |
| **Storage Instruction** | Store at 4°C. For long term storage store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

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## Gene Info — FREQ

| | |
|---|---|
| **Entrez GeneID** | 23413 |
| **Protein Accession#** | P36610 |
| **Gene Name** | FREQ |

| | |
|---|---|
| **Gene Alias** | DKFZp761L1223, FLUP, NCS-1, NCS1 |
| **Gene Description** | frequenin homolog (Drosophila) |
| **Omim ID** | 603315 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | This gene is a member of the neuronal calcium sensor gene family, which encode calcium-bindin g proteins expressed predominantly in neurons. The protein encoded by this gene regulates G pr otein-coupled receptor phosphorylation in a calcium-dependent manner and can substitute for cal modulin. The protein is associated with secretory granules and modulates synaptic transmission and synaptic plasticity. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000022356\|frequenin homolog\|frequenin-like ubiquitous protein\|neuronal calcium se nsor 1 |

## Publication Reference

- Up-regulation of neuronal calcium sensor-1 (NCS-1) in the prefrontal cortex of schizophrenic and bipolar patients.

  Koh PO, Undie AS, Kabbani N, Levenson R, Goldman-Rakic PS, Lidow MS.

  PNAS 2003 Jan; 100(1):313.

  Application: WB-Ce, Human, LDPFC

- The neuronal calcium sensor family of Ca2+-binding proteins.

  Burgoyne RD, Weiss JL.

  The Biochemical Journal 2001 Jan; 353(Pt 1):1.

- Immunocytochemical localization and crystal structure of human frequenin (neuronal calcium sensor 1).

  Bourne Y, Dannenberg J, Pollmann V, Marchot P, Pongs O.

  The Journal of Biological Chemistry 2001 Apr; 276(15):11949.

  Application: IF, WB-Ce, WB-Tr, Monkey, COS-7 cells

## Disease

- Anorexia Nervosa
- Bulimia
- Genetic Predisposition to Disease

- Tobacco Use Disorder