

## **Product datasheet for TA336553**

#### OriGene Technologies, Inc.

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# **Bcl2 Binding component 3 (BBC3) Rabbit Polyclonal Antibody**

### **Product data:**

**Product Type:** Primary Antibodies

Applications: IF, WB

Recommended Dilution: WB: 1 ug/ml, IF: 1:500 - 1:2000

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide made to an N-terminal portion of human PUMA (within residues 1-100).

[NCBI Sequence NP\_001120712]

**Formulation:** Tris-citrate/phosphate, pH 7, 0.1% Sodium azide. Store at 4C. Do not freeze.

**Concentration:** lot specific

**Purification:** Immunogen affinity purified

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 24 kDa

**Gene Name:** BCL2 binding component 3

Database Link: NP 055232

Entrez Gene 170770 MouseEntrez Gene 27113 Human

Q96PG8



Background:

PUMA (p53 upregulated modulator of apoptosis) belongs to pro-apoptotic members of Bcl2 family's BH3-only subgroup, and besides its most critical role as mediator of p53/TP53-dependent/-independent apoptosis, it acts as a regulator of ER stress-induced neuronal apoptosis also. PUMA is expressed ubiquitously and predominately localizes to mitochondria where it execute induction of cytochrome c release. PUMA mediates apoptosis via direct binding with anti-apoptotic members of the Bcl-2 family and is capable of interacting with MCL1, BCL2A1, BCL2 and BCL2L1/BCL-XL. PUMA binding to inhibitory members of Bcl-2 family (Bcl-2-like proteins) leads to Bax and/or Bak displacement mediated activation and formation of pore-like structures over mitochondrial membrane, which permeabilizes the outer mitochondrial membrane, resulting in mitochondrial dysfunction and caspase activation. PUMA is induced by p53, DNA damage, glucocorticoid treatment, deprivation of growth factors etc. and through ER stress in a DDIT3/CHOP-dependent manner. PUMA has been reported to involve in multiple physiological and pathological processes, including immune response, cancer, neurodegenerative diseases and bacterial as well as viral infections.

Synonyms: JFY-1; JFY1; PUMA

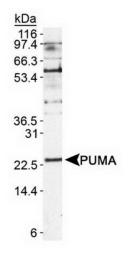
**Note:** This PUMA antibody is useful for Immunocytochemistry/Immunofluorescence and Western

blot, where a band is seen at ~24 kDa. In ICC/IF mitochondrial staining was observed.

**Protein Families:** Druggable Genome

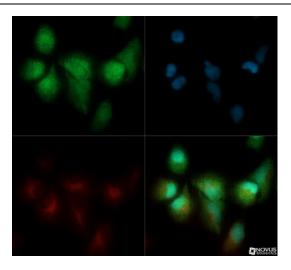
**Protein Pathways:** Huntington's disease, p53 signaling pathway

### **Product images:**



Western Blot: PUMA Antibody TA336553 - Detection of PUMA in HL-60 whole cell lysates using TA336553.





Immunocytochemistry/Immunofluorescence: PUMA Antibody TA336553 - PUMA antibody was tested in Hela cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).