

# BTN3A3 (C-17): sc-138843

## BACKGROUND

BTN3A3 (butyrophilin subfamily 3 member A3), also known as BTF3, is a 584 amino acid protein belonging to the immunoglobulin superfamily and the BTN/MOG family. As a single-pass type I membrane protein, BTN3A3 contains one B30.2/SPRY domain and two Ig-like V-type (immunoglobulin-like) domains. The gene that encodes BTN3A3 maps to human chromosome 6, which contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: BTN3A3 (human) mapping to 6p22.1.

## SOURCE

BTN3A3 (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of BTN3A3 of human origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138843 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BTN3A3 (C-17) is recommended for detection of BTN3A3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with BTN3A1 or BTN3A2.

Suitable for use as control antibody for BTN3A3 siRNA (h): sc-95625, BTN3A3 shRNA Plasmid (h): sc-95625-SH and BTN3A3 shRNA (h) Lentiviral Particles: sc-95625-V.

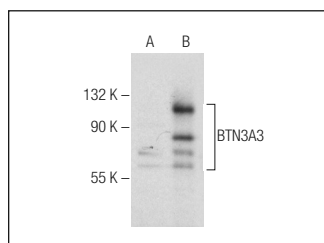
Molecular Weight of BTN3A3: 65 kDa.

Positive Controls: BTN3A3 (h): 293T Lysate: sc-158307.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



BTN3A3 (C-17): sc-138843. Western blot analysis of BTN3A3 expression in non-transfected: sc-117752 (A) and human BTN3A3 transfected: sc-158307 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.