

# BTN3A1 (E-14): sc-241943

## BACKGROUND

BTN3A1 (butyrophilin, subfamily 3, member A1), also known as BTF5, BT3.1 or CD277, is a 513 amino acid single-pass type I membrane protein belonging to the BTN (butyrophilin)/MOG family and immunoglobulin (Ig) superfamily. While highest expression levels are found in lung, heart and pancreas, BTN3A1 is found at moderate levels in muscle, liver and placenta. Expressed as two alternatively spliced isoforms, BTN3A1 contains one B30.2/SPRY domain and two Ig-like V-type (immunoglobulin-like) domains. The gene encoding BTN3A1 maps to human chromosome 6, in close proximity to MHC class I genes. Human chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: BTN3A1 (human) mapping to 6p22.2.

## SOURCE

BTN3A1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of BTN3A1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241943 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BTN3A1 (E-14) is recommended for detection of BTN3A1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with BTN3A2 or BTN3A3.

Suitable for use as control antibody for BTN3A1 siRNA (h): sc-95618, BTN3A1 shRNA Plasmid (h): sc-95618-SH and BTN3A1 shRNA (h) Lentiviral Particles: sc-95618-V.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.