SANTA CRUZ BIOTECHNOLOGY, INC.

# GSE1 (P-17): sc-160458

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier. The GSE1 gene product has been provisionally designated GSE1 pending further characterization.

## REFERENCES


1. Ben Hamida, C., et al. 1997. Homozygosity mapping of giant axonal neuropathy gene to chromosome 16q24.1. Neurogenetics 1: 129-133.
2. Karlsson, J., et al. 2003. Novel quantitative trait loci controlling development of experimental autoimmune encephalomyelitis and proportion of lymphocyte subpopulations. J. Immunol. 170: 1019-1026.
3. Forabosco, P., et al. 2006. Meta-analysis of genome-wide linkage studies of systemic lupus erythematosus. Genes Immun. 7: 609-614.
4. Carneiro, L.A., et al. 2007. NOD-like receptors in innate immunity and inflammatory diseases. Ann. Med. 39: 581-593.
5. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. Genomics 90: 567-573.
6. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. Genomics 90: 493-501.
7. Koop, O., et al. 2007. Genotype-phenotype analysis in patients with giant axonal neuropathy (GAN). Neuromuscul. Disord. 17: 624-630.


## CHROMOSOMAL LOCATION

Genetic locus: GSE1 (human) mapping to 16q24.1; Gse1 (mouse) mapping to 8 E1.

## SOURCE

GSE1 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GSE1 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-160458 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GSE1 (P-17) is recommended for detection of GSE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 other KIAA family members.

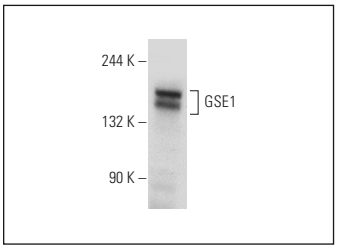
GSE1 (P-17) is also recommended for detection of GSE1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for GSE1 siRNA (h): sc-93036, GSE1 siRNA (m): sc-145800, GSE1 shRNA Plasmid (h): sc-93036-SH, GSE1 shRNA Plasmid (m): sc-145800-SH, GSE1 shRNA (h) Lentiviral Particles: sc-93036-V and GSE1 shRNA (m) Lentiviral Particles: sc-145800-V.

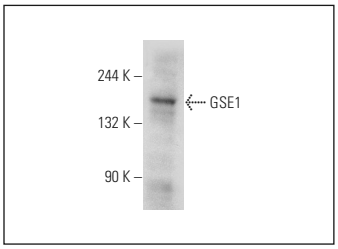
Molecular Weight of GSE1 isoforms: 136/129/126 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or NIH/3T3 whole cell lysate: sc-2210.

## DATA




GSE1 (P-17): sc-160458. Western blot analysis of GSE1 expression in Jurkat whole cell lysate.




GSE1 (P-17): sc-160458. Western blot analysis of GSE1 expression in NIH/3T3 whole cell lysate.

## 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 or our catalog for detailed protocols and support products.