Anti-Human TSC22D4, monoclonal (clone R154.1.3E10)

Recommended name: TSC22 domain family protein 4

Alternative name(s): TSC22-related-inducible leucine zipper protein 2, Tsc-22-like protein THG-1

Cat. No. m13-016 Lot. No. 20150525.L.I Quantity: $100 \mu g$ Storage: $-20 ^{\circ}C$

NOT FOR USE IN HUMANS DATASHEET Page 1 of 2



FOR RESEARCH USE ONLY

Uniprot / NCBI Summary

UniProt

Primary Accession # Q9Y3Q8
Secondary Accession # A4D2C3

NCBI

GenelD <u>81628</u> Accession # AAH31622.1

Molecular Weight 41,026 Da (395 aa)

Transcriptional repressor.

Subunit structure: Forms a homodimer or heterodimer. Can form a heterodimer with TSC22D1.

Subcellular location: Nucleus.

Sequence similarities: Belongs to the TSC-22/Dip/ $\!\!$ Bun family.

Continued on page 2.

Physical Characteristics

Quantity: 100 µg

Concentration: 1.0 mg/ml

Host / Isotype: mouse IgG2a

Clonality: monoclonal; R154.1.3E10

Immunogen: recombinant protein corresponding to amino acids 320-395 of human TSC22D4

Purification: affinity-chromatography using Protein G

Formulation: 30% glycerol, 1x PBS, 0.02%

sodium azide

Specificity: monospecific for human TSC22D4; see microarray analysis below

Reactivity: human

Stability/Storage: 12 months long term: -20°C; short term: 4°C; avoid freeze-thaw cycles; aliquot as required

Handling Notes: small volumes of antibody may occasionally become entrapped in the seal of the product vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container cap.

Tested Research Applications

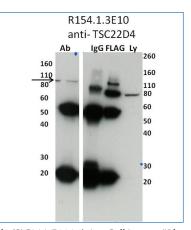
Western Immunoblotting: tested with cells transfected and overexpressing TSC22D4; utility on endogenous tissue under evaluation.

ChIP-Seq: recommended; see page 2

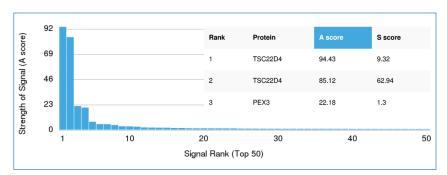
Quality Assurance

IP Analysis:

Ab- Immunoprecipitation of lysate from transfected cells using mAB Anti-TSC22D4 (clone R154.1.3E10) IgG-Immunoprecipitation of lysate from transfected cells using normal mouse IgG control antibody (SIGMA sc-2025) FLAG- Immunoprecipitation of lysate from transfected cells



using FLAG-M2 antibody (SIGMA F1804). Ly- Cell Lysate. *Blotting done with rabbit anti-FLAG from Cell Signaling #2368.



Specificity Analysis with HuProt[™] Human Proteome Microarray: Anti Human TSC22D4 (clone R154.1.3E10) was analyzed using the CDI HuProt[™] Human Proteome Microarray.

For more information on A/S scores and how they relate to specificity, see page 2.



Anti-Human TSC22D4, monoclonal (clone R154.1.3E10)

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NEXTGEN PROTEOMICS

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CERTIFICATE of ANALYSIS Page 2 of 2

Uniprot / NCBI Summary

Continued from page 1.

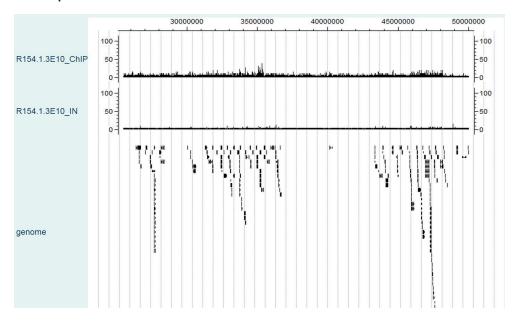
General References:

Kester HA, Blanchetot C, den Hertog J, van der Saag PT, van der Burg B (1999) Transforming growth factor-betastimulated clone-22 is a member of a family of leucine zipper proteins that can homo- and heterodimerize and has transcriptional repressor activity. J Biol Chem 274:27439-27447. [PubMed]

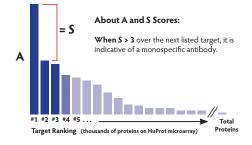
Mayya V, Lundgren DH, Hwang S-I, Rezaul K, Wu L, Eng JK, Rodionov V, Han DK (2009) Quantitative phosphoproteomic analysis of T cell receptor signaling reveals system-wide modulation of protein-protein interactions. Sci Signal 2:RA46-RA46. [PubMed]

Tested Research Applications

ChIP-Seq: Recommended



The ChIP was performed with chromatin from 10 million GM12878 cells and 3 μg of Anti-TSC22D4 (cloneID # R154.1.3E10) antibody. The ChIP DNA was sequenced on an Illumina HiSeq platform and read counts were calculated at consecutive 100 bp bins across the human genome hg19. Normalized read-count levels for ChIP-seq of TSC22D4 (JH39.2.1A1_ChIP) and control (JH39.2.1A1_IN) around a 25,000,000 bp region (chromosome 11: 25,000,000-50,000,000) are displayed in the CisGenome browser.



Statistical Analysis: Thousands of GenePix data points (from the microarray) are analyzed in terms of signal strength and ranked accordingly.

SUMMARY: The A-score indicates the number of standard deviations above background seen for the mean signal bound by the target antigen The S-score represents the difference between the A-score of the target antigen and the next best hit on the array. S-scores greater than 3 standard deviations over the next listed target are deemed statistically significant and indicate highly specific antibodies. More info at cdi-lab.com/HighSpec.html

The development of this antibody was supported by the National Institutes of Health Protein Capture Reagent Program under award U54HG06434 to CDI Laboratories and Johns Hopkins University.

