

Product datasheet for LY400372

OriGene Technologies, Inc.

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SMAD2 (NM_001003652) Human Over-expression Lysate

Product data:

Product Type: Over-expression Lysates

Description: Transient overexpression lysate of SMAD family member 2 (SMAD2), transcript variant 2

Species: Human
Expression Host: HEK293T

Expression cDNA Clone

or AA Sequence:

TrueORF Clone RC206526

Tag: C-Myc/DDK

Detection Antibodies: Clone OTI4C5, Anti-DDK (FLAG) monoclonal antibody (TA50011-100)

ACCN: <u>NM 001003652</u>, <u>NP 001003652</u>

Synonyms: hMAD-2; hSMAD2; JV18; JV18-1; MADH2; MADR2

Predicted MW: 52.3 kDa

Components: 1 vial of 100 µg gene specific transient over-expression cell lysate in RIPA buffer

1 vial of 100 µg whole HEK293T cell lysate in RIPA buffer

1 vial of 250ul 2xSDS Sample Buffer (4% SDS, 125mM Tris-HCl pH6.8, 10% Glycerol, 0.002%

Bromophenol blue, 100mM DTT)

Storage: The lysate is shipped with dry ice. Upon receiving, store the sample at -80°C. Also after

dilution, the protein sample should be aliquoted and stored at -80°C for long term storage. Avoid repeated freeze-thaw cycles. Lysate samples can be diluted with 2xSDS Sample Buffer provided. Lysate samples are stable for 12 months from the date of receipt when stored at -

80°C.

Bioactivity: DNA-binding activity

Preparation: HEK293T cells in 10-cm dishes were transiently transfected with MegaTran Transfection

Reagent (TT200002) and 5ug <u>TrueORF</u> cDNA plasmid. Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer (25mM Tris-HCl pH7.6, 150mM NaCl, 1% NP-40, 1mM EDTA, 1xProteinase inhibitor cocktail mix (Sigma), 1mM PMSF and 1mM Na3VO4), and then centrifuged to clarify the lysate. Protein concentration was measured by BCA kit (Thermo Scientific Inc.). Cell lysates were aliquoted and stored at -20°C

before shipping.

RefSeq: NP 001003652





Locus ID: 4087

Cytogenetics: 18q21.1

Protein Families: Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem

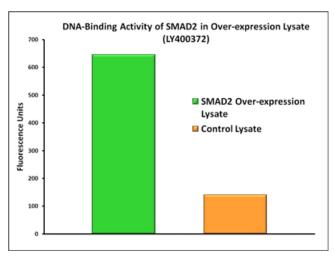
cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP

signaling pathway, Transcription Factors

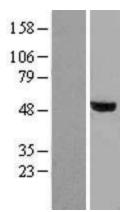
Protein Pathways: Adherens junction, Cell cycle, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-

beta signaling pathway, Wnt signaling pathway

Product images:



DNA-binding activity of SMAD2 was measured in OriGene over-expression lysate LY400372 and a control lysate. Three microliters of each lysate was tested with a transcription factor binding assay utilizing SMAD2-specific DNA sequences. The high level of activity observed in the over-expression lysate compared to the control lysate demonstrates that the expressed SMAD2 is biologically active in the lysate. Overexpression cell lysates are prepared from HEK293T cells transfected with [RC206526] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# LY400372) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC206526] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).