BACKGROUND
TDP-43, a heterogeneous nuclear ribonucleoprotein, was identified as a component of ubiquitin-positive and tau-negative inclusions observed in cases of frontotemporal lobar degeneration (FTLD-U) and amyotrophic lateral sclerosis (ALS). Immunochemical analyses using antibodies generated against phospho- and non-phosphopeptides of human TDP-43 revealed that abnormally phosphorylated full-length TDP-43 (~45 kDa), C-terminal fragments (~25 kDa) and smearing substances are deposited as intracellular inclusions in affected regions of FTLD-U and ALS cases. These antibodies are powerful tools for biochemical and immunohistochemical analyses of neurodegenerative diseases and for evaluation of cellular or animal models of TDP-43 proteinopathy.

Product type: Primary antibody
Raised in: Mouse
Myeloma: -
Clone number: 11-9
Isotype: IgG1
Source: Culture supernatant
Purification: -
Form: Liquid. Supernatant with 0.05% NaN3 as a preservative
Concentration: -
Volume: 50 uL
Label: Unlabeled
Specificity: Phospho TDP-43
Cross reactivity: Human
Storage: Store below -20°C. (below -70°C for prolonged storage).
Aliquot to avoid cycles of freeze/thaw.

Application notes
Recommended dilutions
- Western blotting: 1/1000 - 1/3000
- Immunohistochemistry: 1/3000 - 1/10000
  1/1,000 or a higher dilution is recommended for immunohistochemistry.
- ELISA: 1/1000 - 1/5000

Other applications have not been tested. Optimal dilutions/concentrations should be determined by the end user.

References

www.cosmobio.co.jp
ANTIBODY CHARACTERIZATION

**Figure 1** Immunoblot analyses with mAb pS409/410 (11-9),
Predicted molecular weight: Phosphorylated full-length TDP-43 at 45 kDa, -25 kDa fragments and smearing substances in FTLD-U, ALS and other related disorders.

**Figure 2** Immunohistochemistry of TDP-43 lesions.
NCIs in dentate gyrus of FTLD-U are specifically stained. Bars 100 μm. MAb pS409/410 stains ubiquitin-positive inclusions in FTLD-U and ALS without nuclear staining. This does not stain ghost tangles and granulovacuolar degeneration in AD or other related diseases by immunohistochemistry.

### RELATED PRODUCTS:

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<th>Product Name</th>
<th>Quantity</th>
<th>Maker</th>
<th>Cat#</th>
</tr>
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<td>Anti TDP-43, phospho Ser409/410 (clone:11-9) Monoclonal Antibody</td>
<td>50 μL</td>
<td>CAC</td>
<td>TIP-PTD-M01</td>
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<td>CAC</td>
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