Anti-NSE Antibody

R1401-6

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Zebrafish, Hybrid fish (crucian-carp)
Applications:	WB, IF-Cell
Molecular Wt:	47 kDa

Description: Gamma-enolase is one of the three enolase isoenzymes found in mammals. This isoenzyme, a homodimer, is found in mature neurons and cells of neuronal origin. A switch from alpha enolase to gamma enolase occurs in neural tissue during development in rats and primates. Detection of NSE with antibodies can be used to identify neuronal cells and cells with neuroendocrine differentiation. NSE is produced by small cell carcinomas which are neuroendocrine in origin. NSE is therefore a useful tumor marker for lung cancer patients.

Immunogen: Synthetic peptide within N-terminal human NSE.

Positive control: Hela, NIH/3T3, F9, human brain, mouse brain, A172, SHG-44, N2A hybrid fish (crucian-carp) brain tissue lysate.

Subcellular location: Cytoplasm, cell membrane

Database links: SwissProt: P09104 Human

Recommended Dilutions:

WB	1:2000-1:5,000
IF-Cell	1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

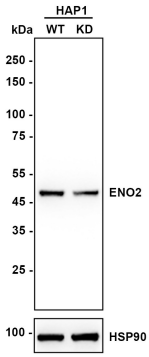

Fig1: Western blot analysis of NSE on different lysates with Rabbit anti-NSE antibody (R1401-6) at 1/5,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-NSE KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 47 kDa
Observed band size: 47 kDa

Exposure time: 8 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (R1401-6) at 1/5,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

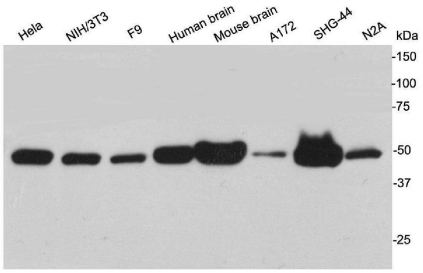

Fig2: Western blot analysis on different cell lysates using anti-NSE rabbit polyclonal antibodies.

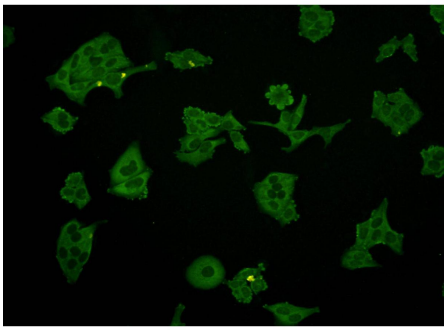

Fig3: ICC staining NSE in Hela cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

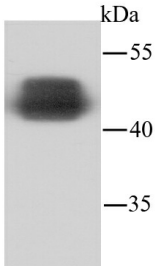

Fig4: Western blot analysis of NSE on hybrid fish (crucian-carp) brain tissue lysate using anti-NSE antibody at 1/500 dilution.

Background References

1. Fujiwara H, Arima N, Ohtsubo H et al. (2002). "Clinical significance of serum neuron-specific enolase in patients with adult T-cell leukemia". Am. J. Hematol. 71 (2): 80–4.
2. Nakatsuka S, Nishiu M, Tomita Y et al. (2005). "Enhanced expression of neuron-specific enolase (NSE) in pyothorax-associated lymphoma (PAL)". Jpn. J. Cancer Res. 93 (4): 411–6.
3. Chekhonin VP, Zhirkov YA, Belyaeva IA et al. (2002). "Serum time course of two brain-specific proteins, alpha(1) brain globulin and neuron-specific enolase, in tick-born encephalitis and Lyme disease". Clin. Chim. Acta 320 (1–2): 117–25.