abcam

Product datasheet

Anti-NSE antibody [5E2] ab10171

[1 Image](#)

Overview

Product name	Anti-NSE antibody [5E2]
Description	Mouse monoclonal [5E2] to NSE
Tested applications	**Suitable for:** ELISA, WB, IHC-P, Flow Cyt, Sandwich ELISA
Species reactivity	**Reacts with:** Human
Immunogen	Full length native protein (purified) (Human).
General notes	Concentration varies from lot to lot and can be provided on request.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.1% Sodium Azide Constituents: PBS, pH 7.4
Purity	Protein G purified
Purification notes	Purity tested by electrophoresis.
Clonality	Monoclonal
Clone number	5E2
Myeloma	Sp2/0
Isotype	IgG2a

Applications

Our Abpromise guarantee covers the use of **ab10171** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration. Can be paired for ELISA with Mouse monoclonal [1C1] to NSE (ab8328).
WB		Use at an assay dependent concentration. Detects a band of approximately 45 kDa.

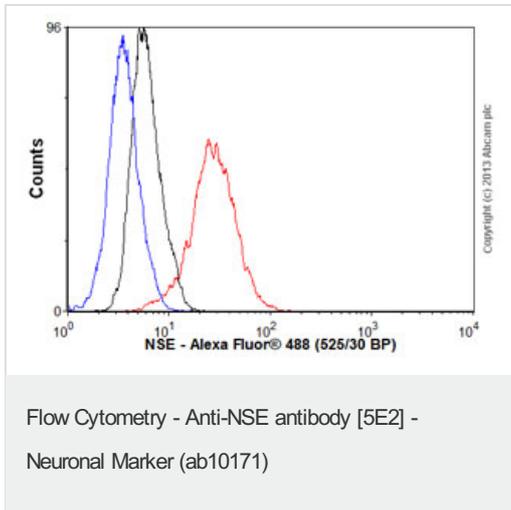| Application	Abreviews	Notes
IHC-P		1/100 - 1/300. Antigen retrieval is not essential but may optimise staining.
Flow Cyt		Use 0.1µg for 10^6 cells. ab170191-Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Mouse monoclonal [1C1] to NSE (HRP) (ab24472) and Mouse monoclonal [1C1] to NSE (ab8328). Can be used as capture antibody in conjunction with ab8328. Can be paired for sandwich ELISA with ab24472

Target

Function	Has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons. Binds, in a calcium-dependent manner, to cultured neocortical neurons and promotes cell survival.
Tissue specificity	The alpha/alpha homodimer is expressed in embryo and in most adult tissues. The alpha/beta heterodimer and the beta/beta homodimer are found in striated muscle, and the alpha/gamma heterodimer and the gamma/gamma homodimer in neurons.
Pathway	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 4/5.
Sequence similarities	Belongs to the enolase family.
Developmental stage	During ontogenesis, there is a transition from the alpha/alpha homodimer to the alpha/beta heterodimer in striated muscle cells, and to the alpha/gamma heterodimer in nerve cells.
Cellular localization	Cytoplasm. Cell membrane. Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form.

Anti-NSE antibody [5E2] images

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Flow Cytometry - Anti-NSE antibody [5E2] - Neuronal Marker (ab10171)

Overlay histogram showing SH-SH5Y cells stained with ab10171 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab10171, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

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