Novocastra™ Lyophilized Mouse Monoclonal Antibody c-jun Oncoprotein

Product Code: NCL-cJUN

Intended Use FOR RESEARCH USE ONLY.

Specificity Human c-jun oncprotein

Clone DK4

Ig Class IgG1

Antigen Used for Immunizations Synthetic peptide corresponding to a continuous antigenic site of predicted high antigenicity on the c-jun molecule (Tiniakos et al., 1994).

Hybridoma Partner Mouse myeloma (p3-NS1-Ag4-1).

Preparation Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.

Effective on Frozen Tissue Yes

Effective on Paraffin Wax Embedded Tissue Yes


Positive Controls Immunohistochemistry: A large proportion of breast cancers are positive. Western Blotting: Not evaluated.

Staining Pattern Nuclear.

Storage and Stability Store unopened lyophilized antibody at 4 ℃. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 ℃. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 ℃ (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.

General Overview c-jun is the normal cellular homolog of the transforming gene of avian sarcoma virus 17 and a member of the early-response gene family. The c-jun oncogene encodes a nuclear protein, p39, which is a major component of the transcription factor AP1 and interacts with the c-fos oncogene product forming a transacting heterodimer. c-jun oncprotein plays an important role in the regulation of gene expression and signal transduction processes. Alterations in c-jun expression may affect the transcriptional initiation of specific target genes and as a consequence may affect normal cell growth and function.


Instructions for Use

Trypsin Digestion for Immunohistochemical Demonstration on Paraffin Sections

1. Preheat the following to 37 °C using a water bath:
   (i) 200 mL of TBS
   (ii) 200 mL of distilled water.
2. Dissolve 0.2 g Trypsin 250 and 0.2 g Calcium chloride in the 200 mL of TBS.
3. Once the Trypsin solution is at 37 °C, pH to 7.8 with 1 M sodium hydroxide.
4. Place rehydrated paraffin sections in the distilled water to preheat the sections to 37 °C for a minimum of 5 minutes.
5. Incubate sections in Trypsin solution at 37 °C. The time required will depend on the antibody and tissue, however, 30 minutes is usually sufficient.
6. Rinse sections in running tap water.
7. Proceed with immunohistochemistry protocol.

Reagents Required but not Supplied
50 mM Tris-buffered saline
Trypsin 250: Difco order code 0152–13 (available from Becton Dickinson).
Calcium chloride
1 M Sodium Hydroxide

* Trypsin containing chymotrypsin should always be used. The enzyme activities can vary from a supplier and between batches. Such variations may affect the incubation time required.