

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects purified human α -Fetoprotein/AFP in Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # 214107 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Human umbilical cord serum-derived α -Fetoprotein/AFP |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|---------------------|---------------------------|--|
| Western Blot | 1 μ g/mL | Human α -Fetoprotein/AFP under non-reducing conditions only |

PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

AFP (α -Fetoprotein) is a 69-73 kDa member of the ALB/AFP/VDB family of proteins. α -Fetoprotein is a major plasma protein in the fetus. Its concentration is normally low in the adult except when produced by certain tumors. It is secreted by fetal liver and serves as a carrier molecule for phytoestrogens, heavy metals (Cu and Ni), estrogen and fatty acids. Mature human AFP is 591 amino acids (aa) in length. It contains three albumin domains (aa 19-210, 211-402 and 403-601), plus 15 intrachain disulfide bonds. Mature human AFP shares approximately 66% aa identity with mouse AFP.

References:

1. Matsumura, M. *et al.* (2001) *Hepatology*. **20**:84
2. Deutsch, H.F. *et al.* (2000) *Tumor Biol.* **21**:267