

DESCRIPTION

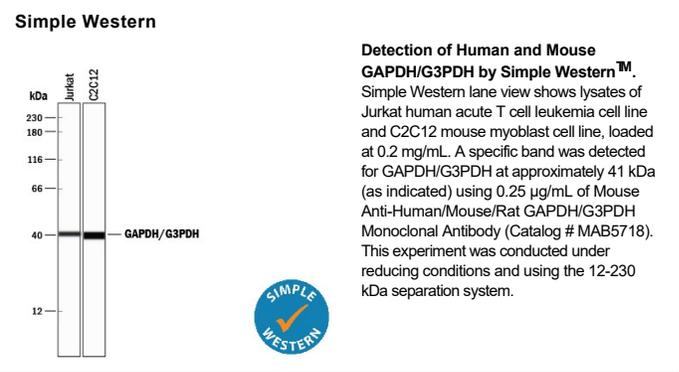
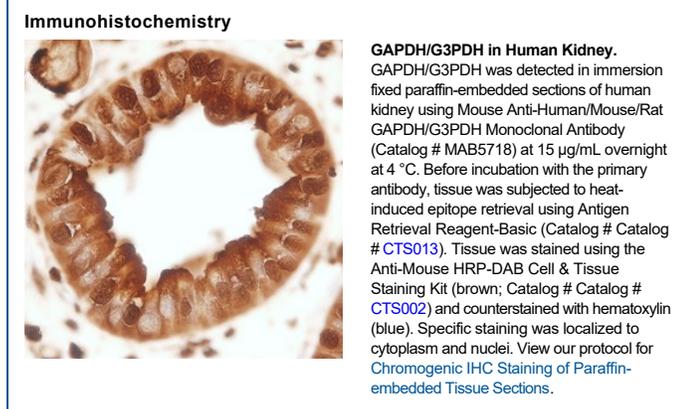
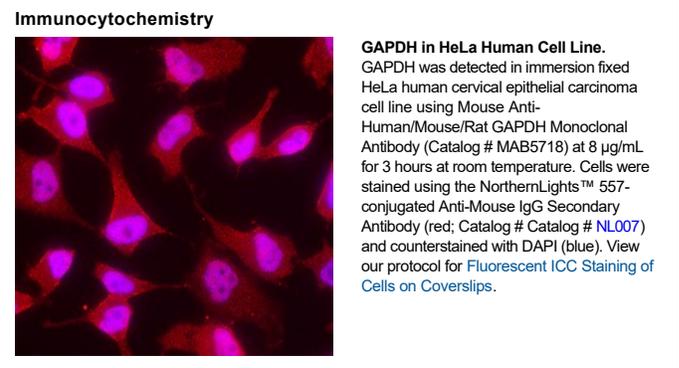
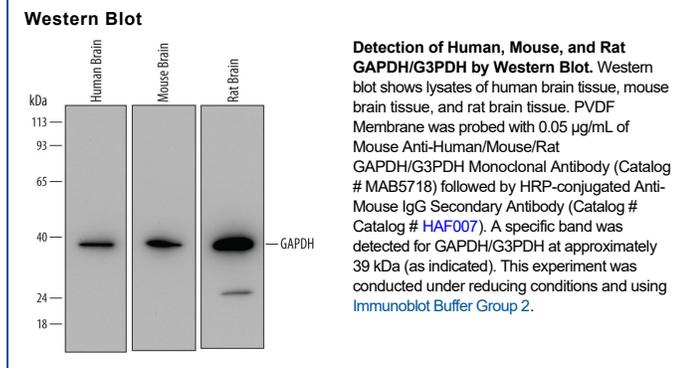
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat GAPDH/G3PDH in Western blots. In direct ELISAs, 100% cross-reactivity with recombinant mouse GAPDH/G3PDH and no cross-reactivity with recombinant human GAPDH-2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 686613
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GAPDH/G3PDH Met1-Ala150 Accession # P04406
Formulation	Lyophilized from a 0.2 µm 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 µm filtered solution in PBS.

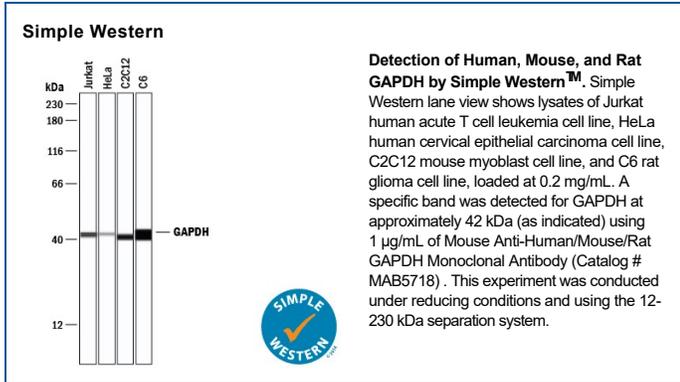
APPLICATIONS

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	0.05 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	0.25 - 1 µg/mL	See Below

DATA





PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

GAPDH (Glyceraldehyde-3-phosphate dehydrogenase) is a 36-40 kDa member of the GAPDH family of enzymes. It is a widely expressed heterotetramer that is found in both the nucleus and cytoplasm. Although GAPDH was initially identified as a glycolytic enzyme that converted G3P into 1,3 diphosphoglycerate, it is now recognized to participate in no less than endocytosis, membrane fusion, vesicular secretory transport, DNA replication and repair, and apoptosis. Human GAPDH is 335 amino acids (aa) in length. There are two NAD binding sites (Asp35 and Asn316) with a catalytic region between aa 151-155. GAPDH contains no fewer than 19 posttranslational modifications, including methylation, deamidation and phosphorylation. One splice variant shows a 10 aa substitution for aa 319-335. Over aa 1-150, human GAPDH shares 92% aa identity with mouse GAPDH.