

DESCRIPTION

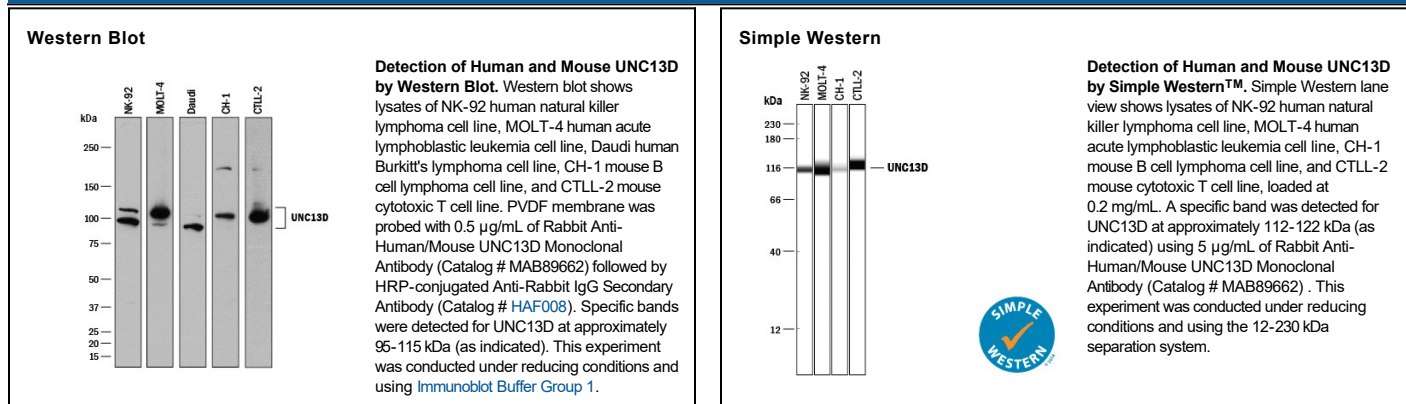
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse UNC13D in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1224B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	KLH-coupled N-terminal human UNC13D peptide Accession # Q70J99
Formulation	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. 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	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. 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 opening. ● 6 months, -20 to -70 °C under sterile conditions after opening.

BACKGROUND

UNC13D (also Munc13-4) is a 123 kDa cytoplasmic and peripheral membrane protein that is expressed at highest levels in hematopoietic tissues. UNC13D appears to play a role in vesicle maturation during exocytosis and its expression is obligatory for exocytosis of cytolytic granules from NK and T cells. A point mutation in intron 1 of UNC13D causes familial hemophagocytic lymphohistiocytosis type3, a rare autosomal recessive immune deficiency. The mutation disrupts transcription factor binding and prevents expression of an alternative isoform that is required for lymphocyte cytotoxicity. The conventional and alternative isoforms are identical from amino acids (aa) 40-1090 but have distinct N-terminal segments. Human and mouse have 75% aa sequence identity throughout the region used as the immunogen. It is unknown whether mice express the alternative isoform.

PRODUCT SPECIFIC NOTICES

* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.