

DESCRIPTION

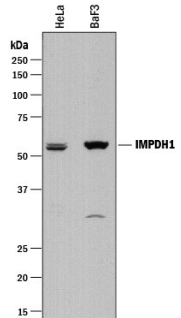
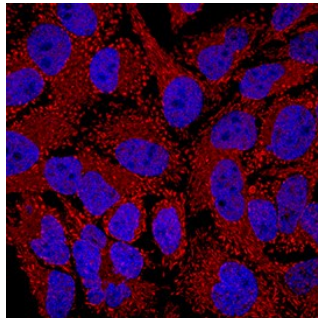
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, rat, and mouse IMP Dehydrogenase 1/IMPDH1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse IMPDH2 is observed.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf21 derived recombinant human IMP Dehydrogenase 1/IMPDH1 Met1-Tyr563 (predicted) Accession # P20839
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 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	1:1000 dilution	See Below
Immunocytochemistry	1:200 dilution	See Below

DATA

<p>Western Blot</p> 	<p>Detection of Human and Mouse IMP Dehydrogenase 1/IMPDH1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and BaF3 mouse pro-B cell line. PVDF membrane was probed with 1:1000 dilution of Rabbit Anti-Human/Mouse/Rat IMP Dehydrogenase 1/IMPDH1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8554) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for IMP Dehydrogenase 1/IMPDH1 at approximately 55-57 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>IMP Dehydrogenase 1/IMPDH1 in HeLa Human Cervical Epithelial Carcinoma Cell Line. IMP Dehydrogenase 1/IMPDH1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Rabbit Anti-Human/Mouse/Rat IMP Dehydrogenase 1/IMPDH1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8554) at a 1:200 dilution for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm and nucleus. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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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

The enzyme IMPDH1 (Inosine-5'-monophosphate dehydrogenase 1) catalyzes the conversion of inosine 5'-phosphate (IMP) to xanthosine 5'-phosphate (XMP), the first committed and rate-limiting step in the de novo synthesis of guanine nucleotides, and therefore plays an important role in the regulation of cell growth. The enzyme is 514 aminoacids long, with a predicted molecular weight of 55 kDa.

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.