

DATASHEET

RagD Rabbit Polyclonal Antibody

CAT. NO. APA14952

KEY FEATURES

Target	RagD	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Guanine nucleotide-binding protein that plays a crucial role in the cellular response to amino acid availability through regulation of the mTORC1 signaling cascade . Forms heterodimeric Rag complexes with RagA/RRAGA or RagB/RRAGB and cycles between an inactive GTP-bound and an active GDP-bound form: RagD/RRAGD is in its active form when GDP-bound RagD/RRAGD forms a complex with GTP-bound RagA/RRAGA (or RagB/RRAGB) and in an inactive form when GTP-bound RagD/RRAGD heterodimerizes with GDP-bound RagA/RRAGA (or RagB/RRAGB) . In its active form, promotes the recruitment of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB . This is a crucial step in the activation of the MTOR signaling cascade by amino acids .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to RagD
Specificity	Recognizes endogenous levels of RagD protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human RagD
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 28; Observed: 46 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Ras-related GTP-binding protein D; Rag D; RagD
Gene Symbol	RRAGD
Entrez Gene	58528(Human); 52187(Mouse)
SwissProt	Q9NQL2(Human); Q7TT45(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

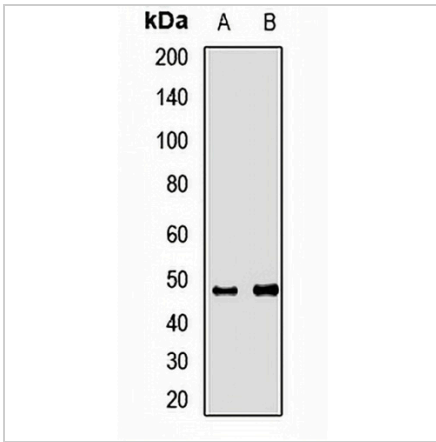
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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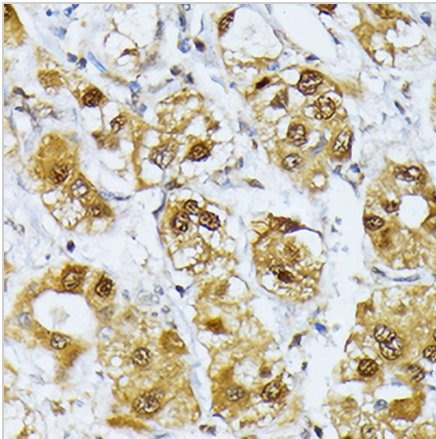
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DATA



Western blot analysis of RagD expression in SHSY5Y (A), mouse heart (B) whole cell lysates. (Predicted band size: 28; 45 kD; Observed band size: 46 kD)



Immunohistochemical analysis of RagD staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.