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GBP4 Rabbit pAb

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Catalog # AP55126

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q96PP9
Predicted	Human, Mouse, Rat, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73165
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GBP4
Epitope Specificity	21-120/640
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Belongs to the GBP family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GBP4 is a 640 amino acid protein that localizes to the cytoplasm and belongs to the guanylate binding protein (GBP) family. Like other GBP proteins, GBP4 contains a conserved N-terminal GTP-binding domain and functions to bind and hydrolyze GTP, GDP and GMP, possibly playing a role in erythroid differentiation. The gene encoding GBP4 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

Additional Information

Gene ID	115361
Other Names	Guanylate-binding protein 4, 3.6.5.-, Guanine nucleotide-binding protein 4, GBP4 {ECO:0000303|Ref.1, ECO:0000312|HGNC:HGNC:20480}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GBP4 {ECO:0000303|Ref.1, ECO:0000312|HGNC:HGNC:20480}
Function	Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against a diverse range of bacterial, viral and protozoan pathogens (By similarity). Negatively regulates the antiviral response by inhibiting activation of IRF7 transcription factor (By similarity).
Cellular Location	Golgi apparatus membrane. Cytoplasm Nucleus. Cytoplasm, perinuclear region. Note=Heterodimers with GBP1, GBP2 and GBP5 localize in the compartment of the prenylated GBPs: with GBP1 in a vesicle-like compartment, with GBP2, around the nucleus and with GBP5, at the Golgi apparatus.

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