

## Product datasheet for **AP01376PU-N**

### GBP1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	<b>Western Blot:</b> 1/500-1/1000. <b>Immunofluorescence:</b> 1/50-1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	GBP1 antibody detects endogenous levels of GBP1 protein. (region surrounding Glu99)
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 68 kDa
Gene Name:	guanylate binding protein 1
Database Link:	<a href="#">Entrez Gene 2633 Human P32455</a>



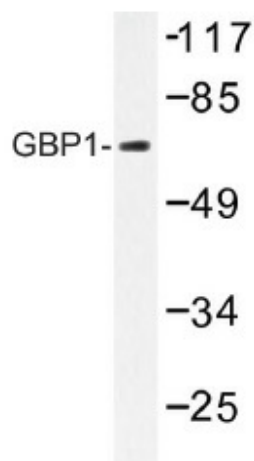
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**Background:**

GBP1 (guanylate binding protein 1) is a 592 amino acid protein member of the GTPase protein family and is able to bind specifically to guanine nucleotides such as GMP, GDP and GTP. GMP is hydrolyzed to GTP in two consecutive cleavage step, both of which are carried out by GBP1. Localized to the cytoplasm, GBP1 is expressed in endothelial cells of the vascular system and is induced by IFN- $\gamma$  during macrophage induction. GBP1 is thought to regulate the expression of MMP-1, which mediates the proliferation and invasiveness of endothelial cells. GBP1 plays a key role in regulating inflammatory cytokines and provides protection against vesicular stomatitis and encephalomyocarditis viruses. GBP1 expression is highly induced in the vessels of skin diseases such as psoriasis and Kaposi's sarcoma, making it a novel cellular activation marker that characterizes inflammatory cytokines of endothelial cells.

**Synonyms:**

Guanine nucleotide-binding protein 1, HuGBP-1

**Product images:**

Western blot (WB) analysis of GBP1 antibody (Cat.-No.: AP01376PU-N) in extracts from HUVEC cells.