

## Product datasheet for **TA372703S**

### HA1 (ARHGAP45) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	IHC: 10-50 Positive control: Human breast cancer Predicted cell location: Cytoplasm
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human ARHGAP45
Formulation:	pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Gene Name:	histocompatibility (minor) HA-1
Database Link:	<a href="#">Entrez Gene 23526 Human Q92619</a>



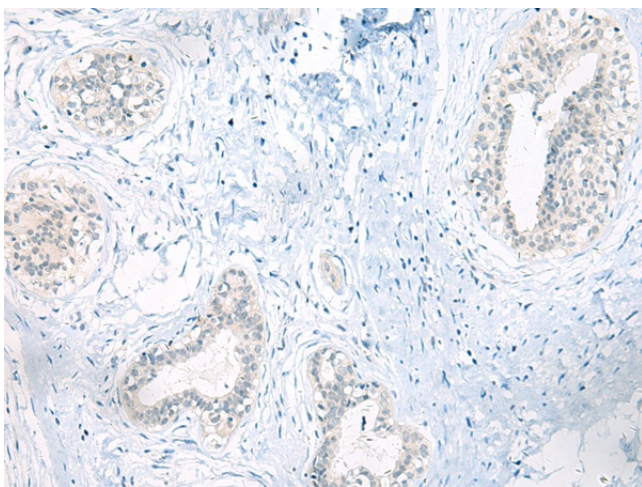
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**Background:**

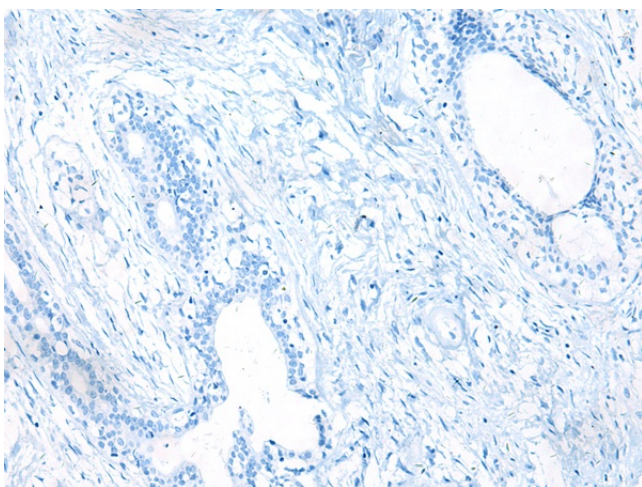
Contains a GTPase activator for the Rho-type GTPases (RhoGAP) domain that would be able to negatively regulate the actin cytoskeleton as well as cell spreading. However, also contains N-terminally a BAR-domain which is able to play an autoinhibitory effect on this RhoGAP activity. Precursor of the histocompatibility antigen HA-1. More generally, minor histocompatibility antigens (mHags) refer to immunogenic peptide which, when complexed with MHC, can generate an immune response after recognition by specific T-cells. The peptides are derived from polymorphic intracellular proteins, which are cleaved by normal pathways of antigen processing. The binding of these peptides to MHC class I or class II molecules and its expression on the cell surface can stimulate T-cell responses and thereby trigger graft rejection or graft-versus-host disease (GVHD) after hematopoietic stem cell transplantation from HLA-identical sibling donor. GVHD is a frequent complication after bone marrow transplantation (BMT), due to mismatch of minor histocompatibility antigen in HLA-matched sibling marrow transplants. Specifically, mismatching for mHag HA-1 which is recognized as immunodominant, is shown to be associated with the development of severe GVHD after HLA-identical BMT. HA-1 is presented to the cell surface by MHC class I HLA-A\*0201, but also by other HLA-A alleles. This complex specifically elicits donor-cytotoxic T-lymphocyte (CTL) reactivity against hematologic malignancies after treatment by HLA-identical allogeneic BMT. It induces cell recognition and lysis by CTL.

**Synonyms:**

HA-1; HLA-HA1; KIAA0223

**Product images:**

Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA372703] (ARHGAP45 Antibody) at dilution 1/20 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using [TA372703] (ARHGAP45 Antibody) at dilution 1/20, treated with synthetic peptide. (Original magnification: ×200)