

## TECHNICAL DATA SHEET

### CyFlow™ ARHGEF4 Purified Anti-Hu; Clone ARHGEF-08

**REF** CC233224

**For Research Use Only.  
Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	ARHGEF4
<b>Alternative Names</b>	—
<b>Clone</b>	ARHGEF-08
<b>Clonality</b>	monoclonal
<b>Format</b>	Purified
<b>Host / Isotype</b>	Mouse / IgG1
<b>Species Reactivity</b>	Human
<b>Negative Species Reactivity</b>	—
<b>Quantity [Concentration]</b>	0.1 mg [ 1 mg/ml ]
<b>Immunogen</b>	Recombinant fragment of human ARHGEF4 (amino acids 143-271)

### Specificity

The mouse monoclonal antibody ARHGEF-08 recognizes human intracellular protein ARHGEF4, a 80 kDa guanine nucleotide exchange factor specific for Rac1 and Cdc42.

#### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Western blot

## Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

ARHGEF4 (Rho guanine nucleotide exchange factor 4), also known as ASEF1 (Adenomatous polyposis coli - stimulated guanine nucleotide exchange factor 1) is an approximately 80 kDa cytoplasmic protein important for growth factor-mediated regulation of cell morphology and migration. Besides N-terminal adenomatous polyposis coli (APC)-binding region (ABR) it contains Dbl homology (DH), Pleckstrin homology (PH) and SH3 domains. The SH3 domain inhibits GEF activity of ARHGEF4 by intramolecular interaction with the DH domain, whereas binding of APC stimulates the GEF activity. Activated ARHGEF4 stimulates the small GTPase Cdc42, which leads to decreased cell-cell adherence and enhanced cell migration.

## References

- Kawasaki Y, Tsuji S, Sagara M, Echizen K, Shibata Y, Akiyama T: Adenomatous polyposis coli and Asef function downstream of hepatocyte growth factor and phosphatidylinositol 3-kinase. J Biol Chem. 2009 Aug 14; 284(33):22436-43. < PMID: 19525225 >
- Lyons R, Williams O, Morrow M, Sebire N, Hubank M, Anderson J: The RAC specific guanine nucleotide exchange factor Asef functions downstream from TEL-AML1 to promote leukaemic transformation. Leuk Res. 2010 Jan; 34(1):109-15. < PMID: 19628279 >
- Zhang Z, Chen L, Gao L, Lin K, Zhu L, Lu Y, Shi X, Gao Y, Zhou J, Xu P, Zhang J, Wu G: Structural basis for the recognition of Asef by adenomatous polyposis coli. Cell Res. 2012 Feb; 22(2):372-86. < PMID: 21788986 >

---

### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

---

The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

---

---

**Contact Information:**

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)