

30-1294: Anti-PRKAR2A Monoclonal Antibody (Clone:Hs-36)

Clonality :	Monoclonal
Clone Name :	Hs-36
Application :	ICC
Reactivity :	Human
Gene :	PRKAR2A
Gene ID :	5576
Uniprot ID :	P13861
Format :	Purified
Alternative Name :	PRKAR2A,PKR2,PRKAR2
Isotype :	Mouse IgM
Immunogen Information :	Freshly ejaculated human sperms were washed in PBS and extracted in 3% acetic acid, 10% glycerol, 30 mM benzaminidine. The acid extract was dialyzed against 0.2% acetic acid and subsequently used for immunization.

Description

PRKAR2A (protein kinase A regulatory type II alpha subunit), also known as PKR2, or PRKAR2, is a component of cAMP-dependent protein kinase complex. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. The PRKAR2A subunit has been shown to regulate protein transport from endosomes to the Golgi apparatus and further to the endoplasmic reticulum (ER). In sperm, this antigen can be used as an intra-acrosomal marker for evaluation of the physiological state of sperm cells as well as for selection of a suitable method of fertilization in the laboratories of assisted reproduction.

Product Info

Amount :	0.1 mg
Purification :	Precipitation and chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Immunocytochemistry *Recommended dilution:* 10 µg/ml
Staining technique: Membrane permeabilization (acetone) is essential.
Western Blotting

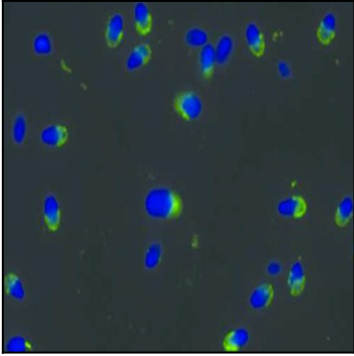


Figure 1: Immunocytochemistry staining of normal human sperm with anti-PRKAR2A antibody (intracellular signal in acrosomes, green); DNA visualized by DAPI (blue).