



Product Datasheet  
**CD45 monoclonal antibody (APC)**  
Catalogue Code: AGIM0474

## Antibody Data

<b>Product SKU:</b>	AGIM0474	<b>Clone</b>	HI30
<b>Applications:</b>	FC	<b>Conjugate</b>	APC
<b>Reactivity:</b>	Human		

## Immunogen Information:

**Host Species:** Mouse

**Isotype:** IgG1

**Storage:** Store at 4 °C. Avoid prolonged exposure to light.

## Background:

CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.