

# CPTC-ITGAM-1 (CAB080213)

Uniprot ID: [P11215](#)

Protein name: ITAM\_HUMAN

Full name: Integrin alpha-M

Tissue specificity: Predominantly expressed in monocytes and granulocytes (PubMed:1346576). Expressed in neutrophils (at protein level) (PubMed:21193407).

Function: Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens (PubMed:9558116, PubMed:20008295). It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). May regulate phagocytosis-induced apoptosis in extravasated neutrophils (By similarity). May play a role in mast cell development (By similarity). Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development (By similarity).

Subcellular location:

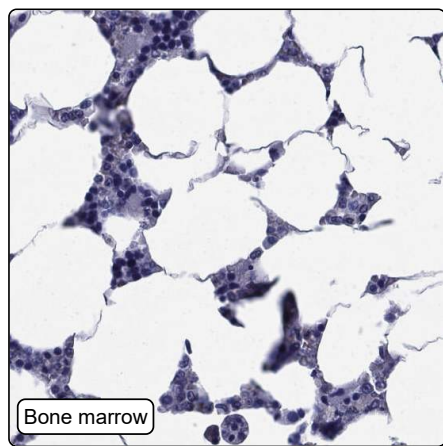
Cell membrane (*experimental evidence*) (Topo: Single-pass type I membrane protein (*curator inference*))

Membrane raft (*experimental evidence*) (Topo: Single-pass type I membrane protein (*curator inference*))

Protein existence: Experimental evidence at protein level

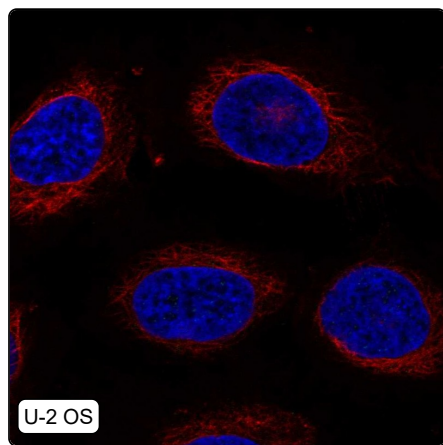
Comment:

## Immunohistochemistry



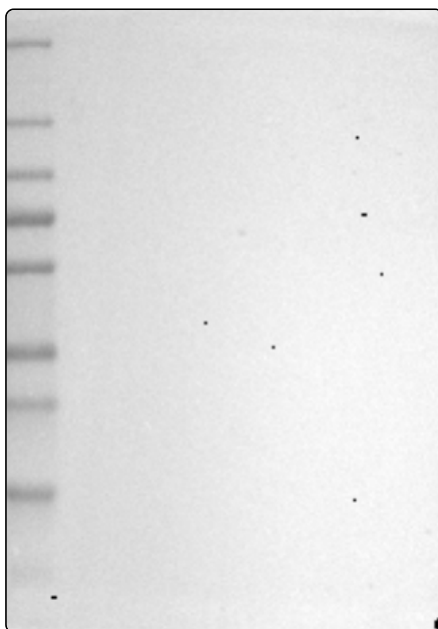
IHC protocol:	HIER pH6, Dilution 1:250
IHC test staining:	Nuclear positivity in few tissues, negative in bone marrow.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Tissue enriched (bone marrow)
RNA tissue distribution:	Detected in many
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern
IHC fail comment:	ANTIBODY FAILED: Improbable histological location, Not consistent with RNA

## Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Negative
IF in U-2 OS:	Negative

# Western blot



<b>WB Size markers (kDa):</b>	250, 130, 100, 70, 55, 35, 25, 15, 10
<b>WB Lanes:</b>	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
<b>WB Target weight (kDa):</b>	12, 18, 127, 127
<b>WB Validation:</b>	Uncertain (No bands detected.)