# Annexin A1

#### UniProt

Function: Calcium/phospholipid-binding protein which promotes membrane fusion and is involved in exocytosis. This protein regulates phospholipase A2 activity. It seems to bind from two to four calcium ions with high affinity.

Subcellular location: Nucleus (By similarity). Cytoplasm (By similarity). Cell projection (By similarity); Cilium (By similarity). Basolateral cell membrane (By similarity). *NOTE*: Found in the cilium, nucleus and basolateral cell membrane of ciliated cells in the tracheal endothelium (By similarity). Found in the cytoplasm of type II pneumocytes and alveolar macrophages (By similarity).

# Three antibodies: ANXA1-1, ANXA1-2 and ANXA1-3 were tested and all antibodies were approved for IHC. ANXA1-1 was selected for full protein profiling.

# ANXA1-1 (CAB035987)



## Immunohistochemistry

**IHC protocol:** HIER pH 6, Dilution 1:15000 **IHC test staining:** Cytoplasmic and membranous staining in several tissues, e.g. placenta, prostate, glomeruli and inflammatory cells. Also nuclear staining in some cell types.

#### **IHC Annotators comments**

The red pulp of spleen, placenta, bone marrow poietic cells, glandular cells in male and female genital tract as well as respiratory, squamous and transitional epithelia, displayed moderate to strong cytoplasmic and nuclear immunoreactivity with occasional membranous positivity. Female genital and thyroid cancers along with several cases of malignant melanomas, lung, skin, urothelial and pancreatic cancers exhibited moderate to strong positivity. Remaining normal and malignant issues were in general weakly stained or negative.



### Immunofluorescence

**IF Overlay**: antibody (green), anti-tubuline (red) and DAPI (blue) **IF Localisation:** Staining of plasma membrane and cytoplasm in U-251 MG. Staining of nuclei and cytoplasm in A-431. Staining of plasma membrnae, cytoplasm, nuclei and nuclear membrane in U-2 OS, with distinct staining in cell junctions. **IF Validation:** Subcellular localization supported by literature.



### Western blot

**WB Size markers (kDa)**: 230, 130, 95, 72, 56, 36, 28, 17, 11 **WB Lanes:** Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 39, 23, 13

**WB Validation:** Supportive (Band of predicted size in kDa (+/-20%) with additional bands present)

Friday, April 23, 2010