

## Recombinant Full Length Human ANXA5 Protein, Tag Free, iFlour 488 Labeled

Cat. No. ANXA5-036H    Lot. No. (See product label)

### SPECIFICATION

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>  | Recombinant Human Annexin A5 (Met1-Asp320) with N-His-Xa tag is expressed in E.coli system. His tag is cut by Xa after purification. This protein is then conjugated to iF488.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>           | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>            | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>ProteinLength</b>     | iFlour 488                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Conjugation/Label</b> | 1-320 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Description</b>       | <p>Annexin V is a calcium-dependent phospholipid-binding protein widely used as a tool to detect apoptosis. It belongs to the annexin family of proteins, which share the ability to bind negatively charged membrane phospholipids in the presence of calcium ions. Annexin V has high affinity for phosphatidylserine (PS), a phospholipid that is normally confined to the inner leaflet of the plasma membrane in healthy cells. During early apoptosis, PS becomes externalized to the outer leaflet, where Annexin V can bind, making it a sensitive marker for programmed cell death. Structurally, Annexin V is a ~35–36 kDa protein composed of four homologous annexin repeats that form a slightly curved, disc-like structure. Each repeat contributes to calcium-binding sites that coordinate calcium ions, enabling the protein to interact with phospholipid head groups. The convex surface of Annexin V mediates membrane binding in a calcium-</p> |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

dependent manner, while the opposite surface remains exposed for detection when conjugated to fluorophores or other labels. Annexin V can also form two-dimensional arrays on membrane surfaces under certain conditions.

|                       |                                                                                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form</b>           | Liquid, 1×PBS buffer, pH7.4, 0.09% NaN <sub>3</sub> with a carrier protein                                                                                               |
| <b>Molecular Mass</b> | This protein has a predicted molecular weight of 35.9 kDa. Under DTT-reducing conditions, the protein migrates at approximately 35 kDa on SDS-PAGE prior to conjugation. |
| <b>Applications</b>   | Flow Cytometry                                                                                                                                                           |
| <b>Storage</b>        | Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8 centigrade for up to six months.                                                         |
| <b>Concentration</b>  | 25 µg size is bottled at 0.1 mg/mL concentration. 100 µg size is bottled at lot specific concentration.                                                                  |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                        |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | ANXA5 annexin A5 [ Homo sapiens (human) ]                                                                                                                                                                                                                                              |
| <b>Official Symbol</b> | ANXA5                                                                                                                                                                                                                                                                                  |
| <b>Synonyms</b>        | ANXA5; annexin A5; ANX5, ENX2; CBP-I; PAP-I; VAC-alpha; annexin V; annexin-5; anchorin CII; endonexin II; lipocortin V; calphobindin I; thromboplastin inhibitor; vascular anticoagulant-alpha; placental anticoagulant protein 4; placental anticoagulant protein I; PP4; ANX5; ENX2; |
| <b>Gene ID</b>         | 308                                                                                                                                                                                                                                                                                    |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                |           |
|----------------|-----------|
| mRNA Refseq    | NM_001154 |
| Protein Refseq | NP_001145 |
| MIM            | 131230    |
| UniProt ID     | P08758    |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA