

## Human Alpha-actinin-4 (ACTN-4) ELISA Kit | ACTN-4 elisa kit

Human Alpha-actinin-4 (ACTN-4) ELISA Kit

CATALOG #  
**AAA331091**

REACTIVITY  
**Human**

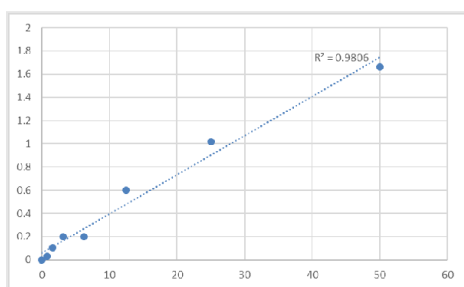
### PRODUCT SYNONYMS

Alpha-actinin-4 (ACTN-4); Human Alpha-actinin-4 (ACTN-4) ELISA Kit; ACTN4; ACTININ-4; DKFZp686K23158; FSGS; FSGS1; actinin alpha4 isoform; ACTN-4 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Human Alpha-actinin-4 (ACTN-4) ELISA Kit has high sensitivity and excellent specificity for detection of Human ACTN4. No significant cross-reactivity or interference between Human ACTN4 and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sequence Length         | 911                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



**Standard Curve (Sample)**

Fig.1. Human Alpha-actinin-4 (ACTN-4) Standard Curve.

ADDITIONAL INFORMATION

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for ACTN-4 elisa kit | <p>Description: This Human Alpha-actinin-4 (ACTN-4) ELISA Kit employs a two-site sandwich ELISA to quantitate ACTN4 in samples. An antibody specific for ACTN4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any ACTN4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACTN4 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of ACTN4 bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. Alpha-actinin-4 is a nonmuscle, alpha actinin isoform which is concentrated in the cytoplasm, and thought to be involved in metastatic processes. Mutations in this gene have been associated with focal and segmental glomerulosclerosis.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                        |
|----------------------------------|------------------------|
| NCBI GI #                        | 13123943               |
| NCBI GeneID                      | 81                     |
| UniProt Accession #              | O43707                 |
| NCBI Official Full Name          | Alpha-actinin-4        |
| NCBI Official Synonym Full Names | actinin alpha 4        |
| NCBI Official Symbol             | ACTN4                  |
| NCBI Official Synonym Symbols    | FSGS; FSGS1; ACTININ-4 |
| NCBI Protein Information         | alpha-actinin-4        |
| UniProt Protein Name             | Alpha-actinin-4        |
| UniProt Gene Name                | ACTN4                  |
| UniProt Entry Name               | ACTN4_HUMAN            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/alpha-actinin-4-actn-4/331091>