

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

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| Product name | Urocortin-2, Human, clone 2D7 | | |
| Catalog number | HM2335 | | |
| Lot number | - | Expiry date | - |
| Volume | 1 ml | Amount | 100 µg |
| Formulation | 0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3 | Concentration | 100 µg/ml |
| Host Species | Mouse IgG1 | Conjugate | None |
| Endotoxin | N.A. | Purification | Protein G |
| Storage | 4°C | | |

Application notes

| | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # | | | | | | 1 | | 1 |
| Yes | | | | | | • | | • |
| No | | | | | | | | |
| N.D. | • | • | • | • | • | | • | |

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



W: Western blot with SUMO-eXact-prepro-Urocortin2 recombinant protein with antibody 2D7 shows 2 bands at 35 and 80 kDa. The antibody concentration used was 1µg/ml.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: Antibody 2D7 can be used as capture antibody (Ref.1).
- W: Protein samples were separated by 16% SDS-PAGE for an hour at 200 V and electroblotted onto Immun-Blot® PVDF membrane at 100 mA for 1 h. Western blotting was performed using mouse 2D7 (1/1000 dilution) as primary antibody and goat anti mouse IgG conjugated to horse radish peroxidase (1/2000). The band sizes are 35 and 80 kDa. (Ref.1).

General Information

Description Monoclonal antibody 2D7 recognizes the pro-region of Urocortin-2. Urocortins 1, 2 and 3 (Ucn I, Ucn II, and Ucn III), members of the corticotropin releasing factor (CRF)4 family, have diverse bioactivities and participate in the neuroendocrine responses to stress, appetite suppression, immunomodulation, energy and water homeostasis, and cardiovascular function. Their actions are mediated through the 7-transmembrane G-protein coupled receptors CRFR1

and CRFR2. Ucn1 binds to both receptors, whereas Ucn II and Ucn III are specific to CRFR2, widely expressed in the brain, heart, vasculature, and peripheral tissues. Binding of Ucn II to its receptor triggers an intricate signaling cascade via protein kinase C, phosphatidylinositol-3-kinase/Akt and mitogen-activated protein kinase pathways to modulate cytokine expression, cell proliferation, and apoptotic responses. The presence of Ucn II and CRFR2 in the heart and vasculature suggest a potentially important role for Ucn II in the physiology and pathophysiology of the circulation in health and cardiovascular disease. Urocortins exert beneficial effects in experimental cardiovascular disease models and may have therapeutic potential. The sequence of the mature human Ucn II neuropeptide is IVLSLDVPIGLLQILLEQARARAAREQATTNARILARV.

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| Immunogen | IMAC-purified SUMO-eXact-preproUCN2 (Ref.1) |
| Aliases | Stresscopin-related peptide, Urocortin II, Ucn II, Urocortin-related peptide |
| Gene | Gene name: UCN2, SRP, URP |
| Cross reactivity | Bovine: No; Rat: No; Mouse: No; Human Ucn I: No; Ucn III: No; Urocortin II signal peptide: No; Urocortin II mature: No. |
| References | 1. Liew, O et al, His6-SUMO-eXact tag for producing human prepro-Urocortin 2 in Escherichia coli for raising monoclonal antibodies. J Immunol Method 2014, 403:37 |
| Storage&stability | Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year. |
| Precautions | For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product. |

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Robbert Zwinkels

Date
17/04/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.

