## Mouse Anti-HEG1 [MD332]: MC0417, MC0417RTU7

Intended Use: For Research Use Only

**Description:** HEG1 (Sialylated protein HEG homolog 1), a 1381 amino acid protein , is expressed in endothelial cells and smooth muscle cells of heart tissue, contains two EGF-like domains that play a role in calcium-binding events which may regulate concentric heart growth. HEG1 is a heavily glycosylated protein that participates in endothelial cell associations that develop the vascular system, and therefore plays a role in angiogenesis and the microenvironment of cellular adhesion. HEG1 mucin-like membrane protein has also been found to be a sensitive and specific biomarker for malignant mesothelioma in pleural (lung) and peritoneal (abdominal) membranes, and several other rare locations, where it supports the survival and proliferation of mesothelioma cells. HEG1 is potentially a useful prognostic biomarker and therapeutic target for malignant mesothelioma and hepatocellular, thyroid, and ovarian carcinomas.

| Description    |  | Catalog No | Size |  |
|----------------|--|------------|------|--|
| Package:       |  |            |      |  |
| Applications:  | IHC  |            |      |  |
| Storage:       | Store at 2°- 8°C   |            |      |  |
| Formulation:   | Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3) |            |      |  |
| Localization:  | Cytoplasm  |            |      |  |
| Immunogen:     | Recombinant fragment aa1-400 of human HEG1 protein                                   |            |      |  |
| Reactivity:    | Human  |            |      |  |
| Isotype:       | IgG2a/k  |            |      |  |
| Source:        | Mouse  |            |      |  |
| Clone:         | MD332  |            |      |  |
| Specifications |  |            |      |  |

| 0 | Description               | Catalog No. | Size |
|---|---------------------------|-------------|------|
|   | HEG1 [MD332] Concentrated | MC0417      | 1 ml |
|   | HEG1 [MD332] Prediluted   | MC0417RTU7  | 7 ml |

## IHC Procedure\*

Positive Control Tissue:Breast, colon and colon adenocarcinoma, lung, prostate, malignant mesotheliomaConcentrated Dilution:25-200Pretreatment:Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°CIncubation Time and Temp:30-60 minutes @ RTDetection:Refer to the detection system manual\* Result should be confirmed by an established diagnostic procedure.



FFPE human thyroid stained with anti-HEG1 using DAB

## **References:**

- 1. HEG1 Is a Highly Specific and Sensitive Marker of Epithelioid Malignant Mesothelioma. Naso JR, et al. Am J Surg Pathol. 2020 Aug;44(8):1143-1148. doi: 10.1097/PAS.00000000001469.
- Hypothesis: HEG1 and claudin-4 staining will allow a diagnosis of epithelioid and biphasic mesothelioma versus nonsmall-cell lung carcinoma with only two stains in most cases. Churg A, et al. Histopathology. 2022 Aug 25. doi: 10.1111/his.14783.

Doc. 100-MC0417 Rev. A