10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FIH Antibody
FIH Antibody, Clone FIH 162c
Catalog # ASM10125

Specification

FIH Antibody - Product Information

Application	**WB, IHC, ICC**
Primary Accession	Q9NWT6
Other Accession	NP_060372.2
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**

Description
Mouse Anti-Human FIH Monoclonal IgG1

Target/Specificity
Detects ~45kDa.

Other Names
Factor inhibiting HIF1 (hypoxia-inducible factor) Antibody, DKFZp762F1811 Antibody, Factor inhibiting HIF-1 Antibody, Factor inhibiting HIF1 Antibody, FIH 1 Antibody, FIH-1 Antibody, FIH1 Antibody, FLJ20615 Antibody, FLJ22027 Antibody, HIF1AN Antibody, HIF1N_HUMAN Antibody, Hypoxia inducible factor 1 alpha inhibitor Antibody, Hypoxia inducible factor 1 alpha subunit inhibitor Antibody, Hypoxia inducible factor asparagine hydroxylase Antibody, Hypoxia-inducible factor 1-alpha inhibitor Antibody, Hypoxia-inducible factor asparagine hydroxylase Antibody, Peptide aspartate beta dioxygenase Antibody

Immunogen
Full length human FIH expressed in E.coli BL21 (DE3) cells

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-182 was sufficient for detection of FIH in 20 µg of Hela lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

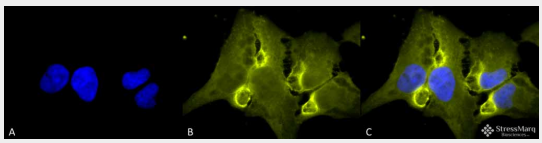
Cellular Localization
Nucleus

FIH Antibody - Protocols

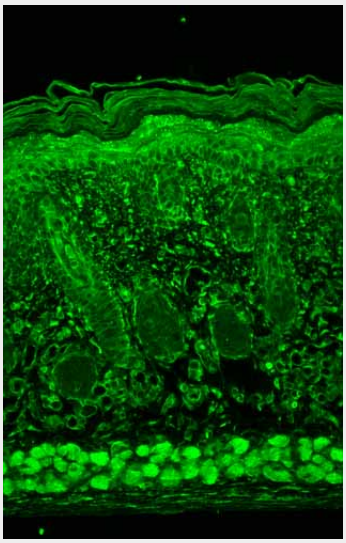
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

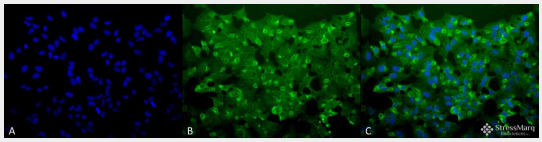
FIH Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FIH Monoclonal Antibody, Clone fih162C (ASM10125). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-FIH Monoclonal Antibody (ASM10125) at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Mouse (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Nucleus. Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-FIH Antibody. (C) Composite.



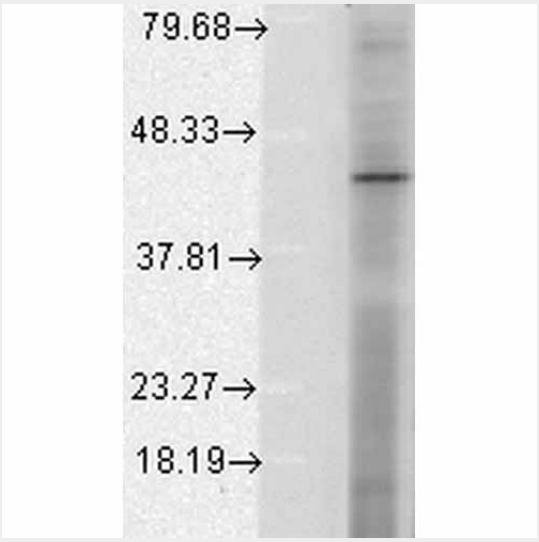
Immunohistochemistry analysis using Mouse Anti-FIH Monoclonal Antibody, Clone fih162C (ASM10125). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-FIH Monoclonal Antibody (ASM10125) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: All positive.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FIH Monoclonal Antibody, Clone fih162C (ASM10125). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-FIH Monoclonal Antibody (ASM10125) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:200 for 2 hours at RT.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Nucleus. Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-FIH Antibody. (C) Composite.



Western Blot analysis of Human Cell lysates showing detection of FIH protein using Mouse Anti-FIH Monoclonal Antibody, Clone fih162c (ASM10125). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-FIH Monoclonal Antibody (ASM10125) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

FIH Antibody - Background

FIH, Factor inhibiting HIF1 (hypoxia-inducible factor), is an asparaginyl hydroxylase. FIH in conjunction with VHL represses HIF-1 transcriptional activity by disrupting the interaction of HIF-1 with the transcriptional co-activators CBP/p300, and by recruiting histone deacetylases. FIH activity is inhibited during hypoxia (1-3). Recent studies show that low nuclear expression of FIH is a strong independent prognostic factor for a poor overall survival in clear cell renal cell carcinoma (4).

FIH Antibody - References

1. Stolze I.P., et al. (2004) J Bio Chem. 42719-42725.
2. Soilleux E.J., et al. (2005) Histopathology 47:602-610.
3. Moon H., Han S., Park H., Choe J. (2010) Mol Cells. 29(5): 471-474.
4. Kroeze S.G., et al. (2010) Eur J Cancer. Epub.