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## Product datasheet for TA347251

## smooth muscle Myosin heavy chain 11 (MYH11) Rabbit Polyclonal Antibody

## Product data:

| Product Type: | Primary Antibodies |
| :---: | :---: |
| Applications: | ELISA, WB |
| Recommended Dilution: | ChIP/ChIP-seq (5ul/ChIP); ELISA (1:200); Western blotting (1:1,000) |
| Reactivity: | Human |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | The immunogen for anti-MYH11 antibody: human MYH11 (Myosin, Heavy Chain 11) using two KLH-conjugated synthetic peptides containing sequences from the C-terminal region of the protein. |
| Concentration: | lot specific |
| Purification: | Whole antiserum from rabbit containing 0.05\% azide. |
| Conjugation: | Unconjugated |
| Storage: | Store at $-20^{\circ} \mathrm{C}$ as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Gene Name: | myosin, heavy chain 11, smooth muscle |
| Database Link: | NP 001035203 |
|  | Entrez Gene 4629 Human |
|  | P35749 |
| Background: | MYH11 (UniProtKB/Swiss-Prot entry P35749) is a smooth muscle myosin belonging to the myosin heavy chain family which function as major contractile proteins. MYH11 is involved in a pericentric inversion of chromosome 16 (inv(16)(p13q22)) which produces a chimeric transcript consisting of the N terminus of CBFb andthe C-terminal portion MYH11. This chromosomal rearrangement is associated with acute myeloid leukemia of the M4Eo subtype. |
| Synonyms: | AAT4; FAA4; SMHC; SMMHC |
| Protein Pathways: | Tight junction, Vascular smooth muscle contraction, Viral myocarditis |

## Product images:



WB using the antibodies against CBFb (lane 1) and MYH11 ( lane 2) diluted 1:1,000 in TBS-Tween containing $5 \%$ skimmed milk. The position of the CBFb and CBFb-MYH11 fusion proteins is indicated on the right.


Determination of the antibody titer To determine the titer of the antibody, an ELISA was performed using a serial dilution of the antibody against human MYH11. The plates were coated with the peptides used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 3), the titer of the antibody was estimated to be 1:1, 900 .

ChIP assays were performed using ME-1 cells, the antibody against MYH11 and optimized primer pairs for qPCR. Sheared chromatin from 1.5 million cells and 5 ul of antibody were used per ChIP experiment. QPCR was performed using primers specific for the genes indicated. Image shows the relative occupancy, calculated as the ratio + control/background for which the MYOG gene was used.


ChIP was performed as described above. The IP'd DNA from 6 ChIPi $^{-}$s was pooled and subsequently analysed on an Illumina HiSeq 2000. Library preparation, cluster generation and sequencing were performed according to the manufacturer's instructions. The 50 bp tags were aligned to the human genome using the BWA algorithm. Image shows the signal in 4 genomic regions surrounding the AXIN1, FUT7, BCL3 and RAD50 positive control genes.

